A.1.1

Alec Malvetis
<malvetia@michigan.gov>
11/08/2006 01:37 PM

To

Subject Severstal in Dearborn, Mich.

History: This message has been forwarded.

Hello:

Kevin Goodwin of our staff had forwarded to me your request for copies of NPDES-related materials. I have attached an electronic copy of the currently, in-effect NPDES permit. This is a Microsoft Word document that you'll need to use the password "exterior.h2o" in order to open (you can only open it as read-only).

Regarding other materials, such as the NPDES application, we don't have PDF copies that I can easily transmit to you. I do know that these application materials were previously sent to Region 5 (more than once). I know that you have big layout of buildings at the W. Jackson Blvd. location, but possibly you can locate the application over there. If not we could make another copy of this sizable document, and send it to you.

A couple of things to note are as follows. The 38 page NPDES permit is designed to address effluent quality at the various monitoring points and outfalls. It will not provide you with direct determinations or information with respect to some items in your e-mail like the "used oil in the diked lagoon, as well as other surface impoundments at the SRWWTP".

Another item to note is that we are currently working to reissue this NPDES permit. We expect to have it reissued in early 2007.

If you have any questions specific to the NPDES permit, I'd be happy to answer those for you.

Alec Malvetis
Environmental Engineer
DEQ-Water Bureau
(517) 335-4124
fax # (517) 241-8133

Permit No MI0043524 iss 2001.dot

PERMIT NO. MI0043524

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et seq; the "Federal Act"), Michigan Act 451, Public Acts of 1994, as amended (the "Michigan Act"), Parts 31 and 41, and Michigan Executive Orders 1991-31, 1995-4 and 1995-18,

Rouge Steel Company
3001 Miller Road
P.O. Box 1699
Dearborn, Michigan 48121

is authorized to discharge from a facility located at

3001 Miller Road
Dearborn, Michigan 48121

designated as Rouge Steel Co

to the receiving water named the Rouge River in accordance with effluent limitations, monitoring requirements and other conditions set forth in this permit.

This permit takes effect on October 1, 2001. Any person who is aggrieved by this permit may file a sworn petition with the Office of Administrative Hearings of the Michigan Department of Environmental Quality, setting forth the conditions of the permit which are being challenged and specifying the grounds for the challenge. The Department may reject any petition filed more than 60 days after issuance as being untimely. If any condition of this permit is administratively challenged, the entire challenged permit is stayed and the previous permit will remain in effect until the Department takes final action after the Administrative Hearing.

This permit and the authorization to discharge shall expire at midnight, October 1, 2006. In order to receive authorization to discharge beyond the date of expiration, the permittee shall submit an application which contains such information and forms as are required by the Michigan Department of Environmental Quality to the Southeast Michigan District Supervisor of the Surface Water Quality Division by April 1, 2006.

In accordance with Section 324.3118 of the Michigan Act, the permittee shall make payment of a $200.00 annual storm water fee to the Department, which shall be postmarked no later than March 15 of each year.

This permit is based on a complete application submitted on March 30, 2001, as amended through September 6, 2001. The provisions of this permit are severable. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term in accordance with applicable laws and rules. On its effective date this permit shall supersede NPDES Permit No. MI0043524, expiring October 1, 2001.

Issued _____.

_____
William E. McCracken
Chief, Permits Section
Surface Water Quality Division

PART I

Section A. Limitations and Monitoring Requirements

1. Final Effluent Limitations, Monitoring Point 001A

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge a maximum of one hundred two million (102,000,000) gallons per day of treated process wastewater, contact cooling water, noncontact cooling water, and boiler blowdown; and an unspecified amount of stormwater runoff from Monitoring Point 001A through Outfall 001 to the Rouge River. Such discharge shall be limited and monitored by the permittee as specified below.

Parameter	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration			Frequency of Analysis	Sample Type
	Monthly	Daily	Units	Monthly	Daily	Units		
Flow	(report)	(report)	MGD	---	---	---	2×Weekly	Report Total Daily Flow
Total Copper	14	---	lbs/day	16	---	µg/l	Weekly	24-Hr Composite
Oil & Grease	---	3,950	lbs/day	---	---	---	2×Weekly	Grab
Total Cadmium	---	---	---	---	(report)	µg/l	Monthly	24-Hr Composite
Temperature	---	---	---	(report)	(report)	°F	2×Weekly	Reading
Total Residual Chlorine	---	---	---	---	(report)	µg/l	Weekly	Grab
				Minimum Daily	Maximum Daily			
Dissolved Oxygen								
May 1-Sept. 30	---	---	---	(report)	---	mg/l	Weekly	Grab
Oct. 1-April 30 (No Monitoring Required)		---	---	---	---	---	---	---
pH	---	---	---	6.5	9.0	S.U.	2×Weekly	Grab
Outfall Observation	(report)	---	---	---	---	---	Daily	Visual
				Maximum Monthly	Maximum Daily			
TIER 1 - FOR IRON MAKING MONTHLY AVERAGE PRODUCTION LESS THAN OR EQUAL TO 6400 TONS PER DAY, THE FOLLOWING LIMITATIONS APPLY:								
Total Suspended Solids	5,050	13,600	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Lead	7.3	22	lbs/day	10	(report)	µg/l	2×Weekly	24-Hr Composite
Total Zinc	8.1	28	lbs/day	(report)	(report)	µg/l	2×Weekly	24-Hr Composite
TIER 2 - FOR IRON MAKING MONTHLY AVERAGE PRODUCTION GREATER THAN 6400 TONS PER DAY AND LESS THAN OR EQUAL TO 7072 TONS PER DAY, THE FOLLOWING LIMITATIONS APPLY:								
Total Suspended Solids	5,090	13,700	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Lead	7.5	22	lbs/day	10	(report)	µg/l	2×Weekly	24-Hr Composite
Total Zinc	8.3	29	lbs/day	(report)	(report)	µg/l	2×Weekly	24-Hr Compos.

PART I

Section A. Limitations and Monitoring Requirements

Parameter	Maximum Limits for Quantity or Loading Monthly	Daily	Units	Maximum Limits for Quality or Concentration Monthly	Daily	Units	Frequency of Analysis	Sample Type
TIER 3 - FOR IRON MAKING MONTHLY AVERAGE PRODUCTION GREATER THAN 7072 TONS PER DAY AND LESS THAN OR EQUAL TO 7744 TONS PER DAY, THE FOLLOWING LIMITATIONS APPLY:								
Total Suspended Solids	5,130	13,800	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Lead	7.6	23	lbs/day	10	(report)	µg/l	2×Weekly	24-Hr Composite
Total Zinc	8.5	29	lbs/day	(report)	(report)	µg/l	2×Weekly	24-Hr Composite
TIER 4 - FOR IRON MAKING MONTHLY AVERAGE PRODUCTION GREATER THAN 7744 TONS PER DAY, THE FOLLOWING LIMITATIONS APPLY:								
Total Suspended Solids	5,170	13,900	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Lead	7.7	23	lbs/day	10	(report)	µg/l	2×Weekly	24-Hr Composite
Total Zinc	8.7	30	lbs/day	(report)	(report)	µg/l	2×Weekly	24-Hr Composite

a. Narrative Standard
The receiving water shall contain no unnatural turbidity, color, oil films, floating solids, foams, settleable solids, or deposits as a result of this discharge in quantities which are or may become injurious to any designated use.

b. Monitoring Location
Samples, measurements, and observations taken in compliance with the monitoring requirements above shall be taken at Monitoring Point 001A prior to discharge to the Rouge River.

c. Outfall Observation
Any unusual characteristics of the discharge (i.e., unnatural turbidity, color, oil film, floating solids, foams, settleable solids, suspended solids, or deposits) shall be reported within 24 hours to the Southeast Michigan District Supervisor of the Surface Water Quality Division followed with a written report within five (5) days detailing the findings of the investigation and the steps taken to correct the condition.

d. Water Treatment Additives
This permit does not authorize the discharge of water additives without approval from the Department. Approval of water additives is authorized under separate correspondence. Water additives include any material that is added to water used at the facility or to a wastewater generated by the facility to condition or treat the water. In the event a permittee proposes to discharge water additives, including an increased discharge concentration of a previously approved water additive, the permittee shall submit a request to the Department for approval. See Part I.A.13. for information on requesting water treatment additive use.

e. Analytical Testing
Monitoring and analyses for total lead shall be conducted in accordance with U.S. EPA Method 239.2. Monitoring and analyses for total zinc shall be conducted in accordance with U.S. EPA Method 200.7. Monitoring and analyses for total cadmium shall be conducted in accordance with U.S. EPA Method 213.2. Monitoring and analyses for total copper shall be conducted in accordance with U.S. EPA Test Method 220.2. Monitoring and analyses for total residual chlorine (TRC) shall be conducted in accordance with U.S. EPA Method 330.1 or through use of Orion Electrode Model 97-70.

Alternate test methods may be used upon approval of the Southeast Michigan District Supervisor of the Surface Water Quality Division.

PART I

Section A. Limitations and Monitoring Requirements

f. Effluent Loading Limitations for Total Suspended Solids, Total Lead, and Total Zinc
Effluent loading limitations for total suspended solids, total lead, and total zinc were calculated using a "water bubble" approach between Monitoring Points 001A and 04B1. Each tier for Monitoring Point 001A is based on the corresponding iron making production level for Monitoring Point 04B1 specified in Part I.A.6.

g. Production Tiers
Beginning on the effective date of this permit, the effluent limitations for tier 2 are in effect. If iron making monthly average production levels are expected to change, the permittee may request that effluent limitations in a different production tier become effective. To activate effluent limitations in a different production tier, the permittee shall notify the Southeast Michigan District Supervisor of the Surface Water Quality Division of the anticipated monthly average production level and the period which the permittee expects to operate at a different production level. A request for effluent limitations based on a different production level shall not be made more than once per quarter.

Upon approval of the Southeast Michigan District Supervisor, the treatment technology-based effluent limitations for the corresponding production level shall become effective. The permittee shall provide written verification to the Southeast Michigan District Supervisor that they have achieved the anticipated monthly average production level which activated the different production tier. The written verification shall be submitted within thirty days after the month in which the permittee expected to operate at the different production level. The permittee shall notify the Southeast Michigan District Supervisor in writing, if the actual production level is below the anticipated production level for three consecutive months. Effluent limitations for the actual production level shall then apply. If production levels decrease due to a blast furnace reline, effluent limitations for the iron making production tier in effect prior to the blast furnace reline shall apply.

h. Monitoring Frequency Reduction for Total Cadmium and/or Total Residual Chlorine
After the submittal of eighteen months of data (i.e., 18 cadmium samples/78 total residual chlorine samples), the permittee may request a reduction in monitoring frequency for total cadmium and/or total residual chlorine. This request shall contain an explanation as to why the reduced monitoring is appropriate and shall be submitted to the Southeast Michigan District Supervisor of the Surface Water Quality Division. Upon receipt of written approval and consistent with such approval, the permittee may reduce the monitoring frequency indicated in Part I.A.1. of this permit. The monitoring frequency for total cadmium and total residual chlorine shall not be reduced to less than annually. The Southeast Michigan District Supervisor may revoke the approval for reduced monitoring at any time upon notification to the permittee.

PART I

Section A. Limitations and Monitoring Requirements

2. Final Effluent Limitations, Monitoring Point 001B

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge a maximum of two million (2,000,000) gallons per day of treated process wastewater from Monitoring Point 001B through Monitoring Point 001A and Outfall 001 to the Rouge River. Such discharge shall be limited and monitored by the permittee as specified below.

Parameter	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration			Frequency of Analysis	Sample Type
	Monthly	Daily	Units	Monthly	Daily	Units		
Flow	(report)	(report)	MGD	---	---	---	2×Weekly	Report Total Daily Flow
Tetrachloroethene	---	2.9	lbs/day	---	(report)	µg/l	Quarterly	Grab
Naphthalene	---	1.9	lbs/day	---	(report)	µg/l	Quarterly	Grab

a. Narrative Standard
The receiving water shall contain no unnatural turbidity, color, oil films, floating solids, foams, settleable solids, suspended solids, or deposits as a result of this discharge.

b. Monitoring Location
Samples, measurements, and observations taken in compliance with the monitoring requirements above shall be taken at Monitoring Point 001B prior to mixing with other wastestreams.

c. Analytical Testing
Tetrachloroethene shall be analyzed using U.S. EPA Test Method 601. Naphthalene shall be analyzed using U.S. EPA Test Method 610. Alternate test methods may be used upon approval of the Southeast Michigan District Supervisor of the Surface Water Quality Division. Quarterly samples for tetrachloroethene and naphthalene shall be collected during the months of January, April, July, and October.

PART I

Section A. Limitations and Monitoring Requirements

3. Final Effluent Limitations, Monitoring Point 002A

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge a maximum of thirteen million (13,000,000) gallons per day of process wastewater, contact cooling water, and noncontact cooling water, and an unspecified amount of stormwater runoff from Monitoring Point 002A through Outfall 002 to the Rouge River. Such discharge shall be limited and monitored by the permittee as specified below.

	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration				
Parameter	Monthly	Daily	Units	Monthly	Daily	Units	Frequency of Analysis	Sample Type
Flow	(report)	(report)	MGD	---	---	---	2×Weekly	Report Total Daily Flow
Total Residual Chlorine (TRC)								
through September 30, 2004	---	---	---	---	(report)	µg/l	Daily	Grab
beginning October 1, 2004								
Continuous TRC Discharge (greater than 160 min/day)			---	---	38	µg/l	Daily	Grab
Intermittent TRC Discharge (less than/equal to 160 min/day)				---	200	µg/l	Daily	Grab
TRC Discharge Time	---	---	---	---	(report)	min/day	Daily	Report Total Discharge Time
Total Suspended Solids								
Intake	---	---	lbs/day	(report)	(report)	mg/l	2×Weekly	24-Hr Composite
Effluent	---	---	lbs/day	(report)	(report)	mg/l	2×Weekly	24-Hr Composite
Net	(report)	---	lbs/day	(report)	---	mg/l	Monthly	Calculation
Oil & Grease	---	---	---	---	(report)	mg/l	2×Monthly	Grab
Temperature	---	---	---	(report)	(report)	°F	2×Weekly	Reading
Total Cadmium	---	---	---	---	(report)	µg/l	Monthly	24-Hr Composite
Total Zinc	---	---	---	---	(report)	µg/l	Monthly	24-Hr Composite
				Minimum Daily	Maximum Daily			
Dissolved Oxygen								
May 1-Sept. 30	---	---	---	(report)	---	mg/l	Weekly	Grab
Oct. 1-April 30 (No Monitoring Required)		---	---	---	---	---	---	---
pH	---	---	---	6.5	9.0	S.U.	2×Weekly	Grab
Outfall Observation	(report)	---	---	---	---	---	Daily	Visual

a. Narrative Standard
The receiving water shall contain no unnatural turbidity, color, oil films, floating solids, foams, settleable solids, suspended solids, or deposits as a result of this discharge which are or may become injurious to any designated use.

b. Monitoring Location
Samples, measurements, and observations taken in compliance with the monitoring requirements above shall be taken at Monitoring Point 002A prior to discharge to the Rouge River.

PART I

Section A. Limitations and Monitoring Requirements

c. Outfall Observation

Any unusual characteristics of the discharge (i.e., unnatural turbidity, color, oil film, floating solids, foams, settleable solids, suspended solids, or deposits) shall be reported within 24 hours to the Southeast Michigan District Supervisor of the Surface Water Quality Division followed with a written report within five (5) days detailing the findings of the investigation and the steps taken to correct the condition.

d. Water Treatment Additives

This permit does not authorize the discharge of water additives without approval from the Department. Approval of water additives is authorized under separate correspondence. Water additives include any material that is added to water used at the facility or to a wastewater generated by the facility to condition or treat the water. In the event a permittee proposes to discharge water additives, including an increased discharge concentration of a previously approved water additive, the permittee shall submit a request to the Department for approval. See Part I.A.13. for information on requesting water treatment additive use.

e. Total Residual Chlorine Requirements

Total Residual Chlorine (TRC) shall be analyzed for using EPA Method 330.1 or Orion Electrode Model 97-70 (alternate methods may be used upon approval of the Southeast Michigan District Supervisor of the Surface Water Quality Division). If chlorine discharge is intermittent, TRC monitoring is only required during periods of chlorine use and subsequent discharge. Limitations for the intermittent discharge of chlorine apply only when the discharge of chlorine is less than or equal to 160 minutes per day, otherwise the limitations for continuous discharge of chlorine apply.

During the intermittent discharge of chlorine, the daily concentration value reported for TRC shall be the average of a minimum of three (3) equally spaced grab samples taken during a chlorine discharge event, with the additional limitation that no single sample may exceed 300 µg/l. The permittee shall enter a zero ("0") on the Discharge Monitoring Report for the TRC discharge modes not being used.

The permittee may use dechlorination techniques to achieve the applicable TRC limitations, using sodium thiosulfate, sodium sulfite, sodium bisulfite, or other dechlorinating reagents approved by the Southeast Michigan District Supervisor. The quantity of reagent(s) used shall be limited to 1.5 times the stoichiometric amount of applied chlorine. Each month the permittee shall report the quantity of each dechlorination reagent used per day.

f. Analytical Testing

Monitoring and analyses for total cadmium shall be conducted in accordance with U.S. EPA Method 213.2. Monitoring and analyses for total zinc shall be conducted in accordance with U.S. EPA Method 200.7. Alternate test methods may be used upon approval of the Southeast Michigan District Supervisor of the Surface Water Quality Division.

g. Net Total Suspended Solids

Net total suspended solids (TSS) is defined as the monthly average effluent value minus the monthly average intake value. When the monthly average net TSS level is greater than 10 mg/l, the permittee shall immediately investigate to determine the cause. The permittee shall submit a report to the Southeast Michigan District Supervisor of the Surface Water Quality Division within 60 days of the first day of the month following the month in which the event occurred. The report shall contain the following: the permittee's explanation as to the cause, steps taken to remedy the situation, the likelihood of reoccurrence, any modification to the existing treatment and control, and additional sampling results (if any).

h. Monitoring Frequency Reduction for Total Cadmium and Total Zinc

After the submittal of eighteen months of data (i.e., 18 cadmium samples/18 zinc samples), the permittee may request a reduction in monitoring frequency for total cadmium and/or total zinc. This request shall contain an explanation as to why the reduced monitoring is appropriate and shall be submitted to the Southeast Michigan District Supervisor of the Surface Water Quality Division. Upon receipt of written approval and consistent with such approval, the permittee may reduce the monitoring frequency indicated in Part I.A.3. of this permit. The monitoring frequency for total cadmium and/or total zinc shall not be reduced to less than annually. The Southeast Michigan District Supervisor may revoke the approval for reduced monitoring at any time upon notification to the permittee.

PART I

Section A. Limitations and Monitoring Requirements

4. Final Effluent Limitations, Monitoring Point 002B

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge a maximum of one million one hundred fifty-one thousand (1,151,000) gallons per day of cooling tower blowdown (continuous casting wastewater) from Monitoring Point 002B through Monitoring Point 002A and Outfall 002 to the Rouge River. Such discharge shall be limited and monitored by the permittee as specified below.

	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration				
Parameter	Monthly	Daily	Units	Monthly	Daily	Units	Frequency of Analysis	Sample Type
Flow	(report)	(report)	MGD	---	---	---	2×Weekly	Report Total Daily Flow
				Minimum Daily	Maximum Daily			
pH	---	---	---	6.0	9.0	S.U.	2×Weekly	Grab
TIER 1 - FOR CONTINUOUS CASTING MONTHLY AVERAGE PRODUCTION LESS THAN OR EQUAL TO 7300 TONS PER DAY, THE FOLLOWING LIMITATIONS APPLY:								
Total Suspended Solids	38	107	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Oil & Grease	15	46	lbs/day	---	---	---	2×Weekly	Grab
Total Lead	0.46	1.4	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Zinc	0.68	2.1	lbs/day	---	---	---	2×Weekly	24-Hr Composite
TIER 2 - FOR CONTINUOUS CASTING MONTHLY AVERAGE PRODUCTION GREATER THAN 7300 TONS PER DAY AND LESS THAN OR EQUAL TO 7994 TONS PER DAY, THE FOLLOWING LIMITATIONS APPLY:								
Total Suspended Solids	42	117	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Oil & Grease	17	50	lbs/day	---	---	---	2×Weekly	Grab
Total Lead	0.50	1.5	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Zinc	0.75	2.3	lbs/day	---	---	---	2×Weekly	24-Hr Composite
TIER 3 - FOR CONTINUOUS CASTING MONTHLY AVERAGE PRODUCTION GREATER THAN 7994 TONS PER DAY AND LESS THAN OR EQUAL TO 8687 TONS PER DAY, THE FOLLOWING LIMITATIONS APPLY:								
Total Suspended Solids	45	127	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Oil & Grease	18	54	lbs/day	---	---	---	2×Weekly	Grab
Total Lead	0.54	1.6	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Zinc	0.81	2.4	lbs/day	---	---	---	2×Weekly	24-Hr Composite
TIER 4 - FOR CONTINUOUS CASTING MONTHLY AVERAGE PRODUCTION GREATER THAN 8687 TONS PER DAY, THE FOLLOWING LIMITATIONS APPLY:								
Total Suspended Solids	49	137	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Oil & Grease	20	59	lbs/day	---	---	---	2×Weekly	Grab
Total Lead	0.59	1.8	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Zinc	0.88	2.6	lbs/day	---	---	---	2×Weekly	24-Hr Composite

PART I

Section A. Limitations and Monitoring Requirements

a. Narrative Standard

The receiving water shall contain no unnatural turbidity, color, oil films, floating solids, foams, settleable solids, or deposits as a result of this discharge which are or may become injurious to any designated use.

b. Monitoring Location

Samples, measurements, and observations taken in compliance with the monitoring requirements above shall be taken at Monitoring Point 002B prior to mixing with other wastestreams.

c. Production Tiers

Beginning on the effective date of this permit, the effluent limitations for tier 2 are in effect. If continuous casting monthly average production levels are expected to change, the permittee may request that effluent limitations in a different production tier become effective. To activate effluent limitations in a different production tier, the permittee shall notify the Southeast Michigan District Supervisor of the Surface Water Quality Division of the anticipated monthly average production level and the period which the permittee expects to operate at a different production level. A request for effluent limitations based on a different production level shall not be made more than once per quarter.

Upon approval of the Southeast Michigan District Supervisor, the treatment technology-based effluent limitations for the corresponding production level shall become effective. The permittee shall provide written verification to the Southeast Michigan District Supervisor that they have achieved the anticipated monthly average production level which activated the different production tier. The written verification shall be submitted within thirty days after the month in which the permittee expected to operate at the different production level. The permittee shall notify the Southeast Michigan District Supervisor in writing, if the actual production level is below the anticipated production level for three consecutive months. Effluent limitations for the actual production level shall then apply. If production levels decrease due to a blast furnace reline, effluent limitations for the continuous casting production tier in effect prior to the blast furnace reline shall apply.

d. Analytical Testing

Monitoring and analyses for total lead shall be conducted in accordance with U.S. EPA Method 239.2. Monitoring and analyses for total zinc shall be conducted in accordance with U.S. EPA Method 200.7. Alternate test methods may be used upon approval of the Southeast Michigan District Supervisor of the Surface Water Quality Division.

PART I

Section A. Limitations and Monitoring Requirements

5. Final Effluent Limitations, Monitoring Point 002C

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge a maximum of five million five hundred thousand (5,500,000) gallons per day of vacuum degassing process wastewater and noncontact cooling water from Monitoring Point 002C through Monitoring Point 002A and Outfall 002 to the Rouge River. Such discharge shall be limited and monitored by the permittee as specified below.

	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration			Frequency	Sample
Parameter	Monthly	Daily	Units	Monthly	Daily	Units	of Analysis	Type
Flow	(report)	(report)	MGD	---	---	---	2×Weekly	Report Total Daily Flow
Total Suspended Solids	39	109	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Lead	0.47	1.4	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Zinc	0.70	2.1	lbs/day	---	---	---	2×Weekly	24-Hr Composite
				Minimum Daily	Maximum Daily			
pH	---	---	---	6.0	9.0	S.U.	2×Weekly	Grab

a. Narrative Standard
The receiving water shall contain no unnatural turbidity, color, oil films, floating solids, foams, settleable solids, or deposits as a result of this discharge which are or may become injurious to any designated use.

b. Monitoring Location
Samples, measurements, and observations taken in compliance with the monitoring requirements above shall be taken at Monitoring Point 002C prior to mixing with other wastestreams.

c. Analytical Testing
Monitoring and analyses for total lead shall be conducted in accordance with U.S. EPA Method 239.2. Monitoring and analyses for total zinc shall be conducted in accordance with U.S. EPA Method 200.7. Alternate test methods may be used upon approval of the Southeast Michigan District Supervisor of the Surface Water Quality Division.

PART I

Section A. Limitations and Monitoring Requirements

6. Final Effluent Limitations, Monitoring Point 04B1

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge a maximum of five hundred twenty thousand (520,000) gallons per day of blast furnace recycle blowdown and boiler blowdown from Monitoring Point 04B1 through Monitoring Point 004B, and Outfall 004 to the Rouge River. Such discharge shall be limited and monitored by the permittee as specified below.

Parameter	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration			Frequency of Analysis	Sample Type
	Monthly	Daily	Units	Monthly	Daily	Units		
Flow	(report)	(report)	MGD	---	---	---	2×Weekly	Report Total Daily Flow
Total Suspended Solids	700	1400	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Lead	2.4	7.2	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Zinc	3.6	7.2	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Ammonia Nitrogen (as N)	190	380	lbs/day	---	---	---	2×Weekly	24-Hr Composite
				Minimum Daily	Maximum Daily			
pH	---	---	---	6.0	9.0	S.U.	2×Weekly	Grab
TIER 1 - FOR IRON MAKING MONTHLY AVERAGE PRODUCTION LESS THAN OR EQUAL TO 6400 TONS PER DAY, THE FOLLOWING LIMITATIONS APPLY:								
Total Phenols (4AAP)	0.37	0.75	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Cyanide	11	22	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Residual Chlorine	---	1.9	lbs/day	---	---	---	2×Weekly	Grab
TIER 2 - FOR IRON MAKING MONTHLY AVERAGE PRODUCTION GREATER THAN 6400 TONS PER DAY AND LESS THAN OR EQUAL TO 7072 TONS PER DAY, THE FOLLOWING LIMITATIONS APPLY:								
Total Phenols (4AAP)	0.41	0.83	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Cyanide	12	25	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Residual Chlorine	---	2.1	lbs/day	---	---	---	2×Weekly	Grab
TIER 3 - FOR IRON MAKING MONTHLY AVERAGE PRODUCTION GREATER THAN 7072 TONS PER DAY AND LESS THAN OR EQUAL TO 7744 TONS PER DAY, THE FOLLOWING LIMITATIONS APPLY:								
Total Phenols (4AAP)	0.45	0.90	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Cyanide	14	27	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Residual Chlorine	---	2.3	lbs/day	---	---	---	2×Weekly	Grab

PART I

Section A. Limitations and Monitoring Requirements

Parameter	Maximum Limits for Quantity or Loading: Monthly	Daily	Units	Maximum Limits for Quality or Concentration: Monthly	Daily	Units	Frequency of Analysis	Sample Type
TIER 4 - FOR IRON MAKING MONTHLY AVERAGE PRODUCTION GREATER THAN 7744 TONS PER DAY, THE FOLLOWING LIMITATIONS APPLY:								
Total Phenols (4AAP)	0.49	0.98	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Cyanide	15	29	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Residual Chlorine	---	2.5	lbs/day	---	---	---	2×Weekly	Grab

a. Narrative Standard
The receiving water shall contain no unnatural turbidity, color, oil films, floating solids, foams, settleable solids, or deposits as a result of this discharge which are or may become injurious to any designated use.

b. Monitoring Location
Samples, measurements, and observations taken in compliance with the monitoring requirements above shall be taken at Monitoring Point 04B1, downstream of the sand filter, prior to discharge to Monitoring Point 004B and prior to mixing with other wastestreams.

c. Production Tiers
Beginning on the effective date of this permit, the effluent limitations for tier 2 are in effect. If iron making monthly average production levels are expected to change, the permittee may request that effluent limitations in a different production tier become effective. To activate effluent limitations in a different production tier, the permittee shall notify the Southeast Michigan District Supervisor of the Surface Water Quality Division of the anticipated monthly average production level and the period which the permittee expects to operate at a different production level. A request for effluent limitations based on a different production level shall not be made more than once per quarter.

Upon approval of the Southeast Michigan District Supervisor, the treatment technology-based effluent limitations for the corresponding production level shall become effective. The permittee shall provide written verification to the Southeast Michigan District Supervisor that they have achieved the anticipated monthly average production level which activated the different production tier. The written verification shall be submitted within thirty days after the month in which the permittee expected to operate at the different production level. The permittee shall notify the Southeast Michigan District Supervisor in writing, if the actual production level is below the anticipated production level for three consecutive months. Effluent limitations for the actual production level shall then apply. If production levels decrease due to a blast furnace reline, effluent limitations for the iron making production tier in effect prior to the blast furnace reline shall apply.

d. 301(g) Variance for Ammonia Nitrogen (as N)
Pursuant to the terms of a stay of the ammonia nitrogen BAT effluent limitations, issued on August 11, 1989 by the U.S. EPA, the permittee is authorized to discharge blast furnace recycle blowdown from outfall 04B1 in accordance with the alternative effluent limitations for ammonia nitrogen in Part I.A.6.

e. Effluent Loading Limitations for Total Suspended Solids, Total Lead, and Total Zinc
Effluent loading limitations for total suspended solids, total lead, and total zinc were calculated using a "water bubble" approach between Monitoring Point 001A and Monitoring Point 04B1.

f. Analytical Testing
Monitoring and analyses for total lead shall be conducted in accordance with U.S. EPA Method 239.2. Monitoring and analyses for total zinc shall be conducted in accordance with U.S. EPA Method 200.7. Monitoring and analyses for total residual chlorine (TRC) shall be conducted in accordance with U.S. EPA Method 330.1 or through use of Orion Electrode Model 97-70. Monitoring and analyses for total phenols shall be conducted in accordance with U.S. EPA Test Method 604. Alternate test methods may be used upon approval of the Southeast Michigan District Supervisor of the Surface Water Quality Division.

PART I

Section A. Limitations and Monitoring Requirements

7. Final Effluent Limitations, Monitoring Point 004B

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge a maximum of three hundred fifty million (350,000,000) gallons per day of blast furnace recycle blowdown, excess mill water, and boiler blowdown; and an unspecified amount of stormwater runoff from Monitoring Point 004B through Outfall 004 to the Rouge River (also see Part I.A.7.b., below) Such discharge shall be limited and monitored by the permittee as specified below.

Parameter	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration			Frequency of Analysis	Sample Type
	Monthly	Daily	Units	Monthly	Daily	Units		
Flow	(report)	(report)	MGD	---	---	---	2×Weekly	Report Total Daily Flow
Combined Flow from Monitoring Point 004B and Monitoring Point 006A	(report)	(report)	MGD	---	---	---	2×Weekly	Report Total Daily Flow
Total Residual Chlorine (TRC)								
through September 30, 2004	---	---	---	---	(report)	µg/l	Daily	Grab
beginning October 1, 2004								
Continuous TRC Discharge (greater than 160 min/day)			---	---	38	µg/l	Daily	Grab
Intermittent TRC Discharge (less than/equal to 160 min/day)				---	200	µg/l	Daily	Grab
TRC Discharge Time	---	---	---	---	(report)	min/day	Daily	Report Total Discharge Time
Oil & Grease	---	---	---	---	(report)	mg/l	Monthly	Grab
Ammonia Nitrogen (as N)	---	---	---	---	(report)	mg/l	Monthly	Grab
Amenable Cyanide	---	---	---	---	(report)	µg/l	Quarterly	Grab
Phenolic Compounds	---	---	---	---	(report)	µg/l	Quarterly	24-Hr Composite
Total Copper	---	---	---	---	(report)	µg/l	Quarterly	24-Hr Composite
Total Lead	---	---	---	---	(report)	µg/l	Quarterly	24-Hr Composite
Temperature	---	---	---	(report)	(report)	°F	2×Weekly	Grab
				Minimum Daily	Maximum Daily			
Dissolved Oxygen								
May 1-Sept. 30	---	---	---	(report)	---	mg/l	Weekly	Grab
Oct. 1-April 30 (No Monitoring Required)		---	---	---	---	---	---	---
pH	---	---	---	6.5	9.0	S.U.	2×Weekly	Grab
Outfall Observation	(report)	---	---	---	---	---	Daily	Visual

a. Narrative Standard
The receiving water shall contain no unnatural turbidity, color, oil films, floating solids, foams, settleable solids, suspended solids, or deposits as a result of this discharge which are or may become injurious to any designated use.

PART I

Section A. Limitations and Monitoring Requirements

b. Authorized Combined Maximum Flow from Monitoring Point 004B and Monitoring Point 006A
The combined discharge flow rate from Monitoring Point 004B and Monitoring Point 006A shall not exceed four hundred forty million (440,000,000) gallons per day.

c. Monitoring Location
Samples, measurements, and observations taken in compliance with the monitoring requirements above shall be taken at Monitoring Point 004B prior to discharge to the Rouge Complex Boat Slip.

d. Outfall Observation
Any unusual characteristics of the discharge (i.e., unnatural turbidity, color, oil film, floating solids, foams, settleable solids, suspended solids, or deposits) shall be reported within 24 hours to the Southeast Michigan District Supervisor of the Surface Water Quality Division followed with a written report within five (5) days detailing the findings of the investigation and the steps taken to correct the condition.

e. Water Treatment Additives
This permit does not authorize the discharge of water additives without approval from the Department. Approval of water additives is authorized under separate correspondence. Water additives include any material that is added to water used at the facility or to a wastewater generated by the facility to condition or treat the water. In the event a permittee proposes to discharge water additives, including an increased discharge concentration of a previously approved water additive, the permittee shall submit a request to the Department for approval. See Part I.A.13. for information on requesting water treatment additive use.

f. Total Residual Chlorine Requirements
Total Residual Chlorine (TRC) shall be analyzed for using EPA Method 330.1 or Orion Electrode Model 97-70 (alternate methods may be used upon approval of the Southeast Michigan District Supervisor of the Surface Water Quality Division). If chlorine discharge is intermittent, TRC monitoring is only required during periods of chlorine use and subsequent discharge. Limitations for the intermittent discharge of chlorine apply only when the discharge of chlorine is less than or equal to 160 minutes per day, otherwise the limitations for continuous discharge of chlorine apply.

During the intermittent discharge of chlorine, the daily concentration value reported for TRC shall be the average of a minimum of three (3) equally spaced grab samples taken during a chlorine discharge event, with the additional limitation that no single sample may exceed 300 µg/l. The permittee shall enter a zero ("0") on the Discharge Monitoring Report for the TRC discharge modes not being used.

The permittee may use dechlorination techniques to achieve the applicable TRC limitations, using sodium thiosulfate, sodium sulfite, sodium bisulfite, or other dechlorinating reagents approved by the Southeast Michigan District Supervisor. The quantity of reagent(s) used shall be limited to 1.5 times the stoichiometric amount of applied chlorine. Each month the permittee shall report the quantity of each dechlorination reagent used per day.

g. Analytical Testing
Monitoring and analyses for amenable cyanide shall be conducted in accordance with U.S. EPA Method 335.1. Monitoring and analyses for total lead shall be conducted in accordance with U.S. EPA Method 239.2. Monitoring and analyses for total copper shall be conducted in accordance with U.S. EPA Method 220.2. Monitoring and analyses for phenolic compounds shall be conducted in accordance with U.S. EPA Test Method 604.

Alternate test methods may be used upon approval of the Southeast Michigan District Supervisor of the Surface Water Quality Division. Quarterly samples for amenable cyanide, phenolic compounds, total copper and total lead shall be collected during the months of January, April, July, and October. Analytical results for phenolic compounds shall be included as an attachment to the monthly submittal of Discharge Monitoring Reports.

h. Monitoring Frequency Reduction for Amenable Cyanide, Total Lead, Total Copper and Phenolic Compounds
After the submittal of twenty-four months of data (i.e., 8 samples for each parameter/pollutant), the permittee may request a reduction in monitoring frequency for amenable cyanide, total lead, total copper and/or phenolic compounds. This request shall contain an explanation as to why the reduced monitoring is appropriate and shall be submitted to the Southeast Michigan District Supervisor of the Surface Water Quality Division. Upon receipt of written approval and consistent with such approval, the permittee may reduce the monitoring frequency indicated in Part I.A.7. of this permit. The monitoring frequency for amenable cyanide, total lead, total copper and/or phenolic compounds shall not be reduced to less than annually. The Southeast Michigan District Supervisor may revoke the approval for reduced monitoring at any time upon notification to the permittee.

PART I

Section A. Limitations and Monitoring Requirements

8. Final Effluent Limitations, Monitoring Point 04C1

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge a maximum of fifty thousand (50,000) gallons per day of ladle cleaning wastewater from Monitoring Point 04C1 through Monitoring Point 004C and Outfall 004 to the Rouge River. Such discharge shall be limited and monitored by the permittee as specified below.

	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration				
Parameter	Monthly	Daily	Units	Monthly	Daily	Units	Frequency of Analysis	Sample Type
Flow	(report)	(report)	MGD	---	---	---	2×Weekly	Report Total Daily Flow
Total Suspended Solids	13	29	lbs/day	30	70	mg/l	2×Weekly	24-Hr Composite
				Minimum Daily	Maximum Daily			
pH	---	---	---	6.0	9.0	S.U.	2×Weekly	Grab

a. Narrative Standard
The receiving water shall contain no unnatural turbidity, color, oil films, floating solids, foams, settleable solids, or deposits as a result of this discharge which are or may become injurious to any designated use.

b. Monitoring Location
Samples, measurements, and observations taken in compliance with the monitoring requirements above shall be taken at Monitoring Point 04C1 prior to mixing with other wastestreams.

PART I

Section A. Limitations and Monitoring Requirements

9. Final Effluent Limitations, Monitoring Point 004C

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge a maximum of four million one hundred thousand (4,100,000) gallons per day of ladle cleaning wastewater and noncontact cooling water, and an unspecified amount of stormwater runoff from Monitoring Point 004C through Outfall 004 to the Rouge River. Such discharge shall be limited and monitored by the permittee as specified below.

	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration			Frequency	Sample
Parameter	Monthly	Daily	Units	Monthly	Daily	Units	of Analysis	Type
Flow	(report)	(report)	MGD	---	---	---	2×Weekly	Report Total Daily Flow
Total Residual Chlorine	---	---	---	---	(report)	µg/l	Weekly	Grab
Oil & Grease	---	---	---	---	(report)	mg/l	Monthly	Grab
Total Cadmium	---	---	---	---	(report)	µg/l	Quarterly	Grab
Temperature	---	---	---	(report)	(report)	°F	2×Weekly	Grab
				Minimum Daily	Maximum Daily			
pH	---	---	---	6.5	9.0	S.U.	2×Weekly	Grab
Outfall Observation	(report)	---	---	---	---	---	Daily	Visual

a. Narrative Standard
The receiving water shall contain no unnatural turbidity, color, oil films, floating solids, foams, settleable solids, suspended solids, or deposits as a result of this discharge which are or may become injurious to any designated use.

b. Monitoring Location
Samples, measurements, and observations taken in compliance with the monitoring requirements above shall be taken at Monitoring Point 004C prior to discharge to the Rouge Complex Boat Slip.

c. Outfall Observation
Any unusual characteristics of the discharge (i.e., unnatural turbidity, color, oil film, floating solids, foams, settleable solids, suspended solids, or deposits) shall be reported within 24 hours to the Southeast Michigan District Supervisor of the Surface Water Quality Division followed with a written report within five (5) days detailing the findings of the investigation and the steps taken to correct the condition.

d. Analytical Testing
Monitoring and analyses for total cadmium shall be conducted in accordance with U.S. EPA Method 213.2. Monitoring and analyses for total residual chlorine (TRC) shall be conducted in accordance with U.S. EPA Method 330.1 or through use of Orion Electrode Model 97-70. Alternate test methods may be used upon approval of the Southeast Michigan District Supervisor of the Surface Water Quality Division. Quarterly samples for total cadmium shall be collected during the months of January, April, July, and October.

e. Water Treatment Additives
This permit does not authorize the discharge of water additives without approval from the Department. Approval of water additives is authorized under separate correspondence. Water additives include any material that is added to water used at the facility or to a wastewater generated by the facility to condition or treat the water. In the event a permittee proposes to discharge water additives, including an increased discharge concentration of a previously approved water additive, the permittee shall submit a request to the Department for approval. See Part I.A.13. for information on requesting water treatment additive use.

PART I

Section A. Limitations and Monitoring Requirements

10. Final Effluent Limitations, Monitoring Point 004D

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge a maximum of twenty-six million (26,000,000) gallons per day of noncontact cooling water, and an unspecified amount of stormwater runoff from Monitoring Point 004D through Outfall 004 to the Rouge River. Such discharge shall be limited and monitored by the permittee as specified below.

	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration			Frequency	Sample
Parameter	Monthly	Daily	Units	Monthly	Daily	Units	of Analysis	Type
Flow	(report)	(report)	MGD	---	---	---	2×Weekly	Report Total Daily Flow
Oil & Grease	---	---	---	---	(report)	mg/l	Monthly	Grab
Total Residual Chlorine	---	---	---	---	(report)	µg/l	Weekly	Grab
Total Cadmium	---	---	---	---	(report)	µg/l	Monthly	Grab
Total Copper	---	---	---	---	(report)	µg/l	Quarterly	Grab
Temperature	---	---	---	(report)	(report)	°F	2×Weekly	Grab
Outfall Observation	(report)	---	---	---	---	---	Daily	Visual

a. Narrative Standard
The receiving water shall contain no unnatural turbidity, color, oil films, floating solids, foams, settleable solids, suspended solids, or deposits as a result of this discharge which are or may become injurious to any designated use.

b. Monitoring Location
Samples, measurements, and observations taken in compliance with the monitoring requirements above shall be taken at Monitoring Point 004D prior to discharge to the Rouge Complex Boat Slip.

c. Outfall Observation
Any unusual characteristics of the discharge (i.e., unnatural turbidity, color, oil film, floating solids, foams, settleable solids, suspended solids, or deposits) shall be reported within 24 hours to the Southeast Michigan District Supervisor of the Surface Water Quality Division followed with a written report within five (5) days detailing the findings of the investigation and the steps taken to correct the condition.

d. Analytical Testing
Monitoring and analyses for total copper shall be conducted in accordance with U.S. EPA Method 220.2. Monitoring and analyses for total cadmium shall be conducted in accordance with U.S. EPA Method 213.2. Monitoring and analyses for total residual chlorine (TRC) shall be conducted in accordance with U.S. EPA Method 330.1 or through use of Orion Electrode Model 97-70. Alternate test methods may be used upon approval of the Southeast Michigan District Supervisor of the Surface Water Quality Division. Quarterly samples for total copper shall be collected during the months of January, April, July, and October.

e. Water Treatment Additives
This permit does not authorize the discharge of water additives without approval from the Department. Approval of water additives is authorized under separate correspondence. Water additives include any material that is added to water used at the facility or to a wastewater generated by the facility to condition or treat the water. In the event a permittee proposes to discharge water additives, including an increased discharge concentration of a previously approved water additive, the permittee shall submit a request to the Department for approval. See Part I.A.13. for information on requesting water treatment additive use.

PART I

Section A. Limitations and Monitoring Requirements

f. Monitoring Frequency Reduction for Total Residual Chlorine, Total Cadmium and Total Copper
After the submittal of eighteen months of data (i.e., 78 residual chlorine samples/8 cadmium samples/6 copper samples), the permittee may request a reduction in monitoring frequency for total cadmium and/or total copper. This request shall contain an explanation as to why the reduced monitoring is appropriate and shall be submitted to the Southeast Michigan District Supervisor of the Surface Water Quality Division. Upon receipt of written approval and consistent with such approval, the permittee may reduce the monitoring frequency indicated in Part I.A.10. of this permit. The monitoring frequency for total residual chlorine, total cadmium and/or total copper shall not be reduced to less than annually. The Southeast Michigan District Supervisor may revoke the approval for reduced monitoring at any time upon notification to the permittee.

PART I

Section A. Limitations and Monitoring Requirements

11. Final Effluent Limitations, Monitoring Point 04E0

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge a maximum of thirty million (30,000,000) gallons per day of noncontact cooling water, and an unspecified amount of stormwater runoff from Monitoring Point 04E0 through Outfall 004 to the Rouge River via the Roulo Creek Enclosure. Such discharge shall be limited and monitored by the permittee as specified below.

	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration			Frequency	Sample
Parameter	Monthly	Daily	Units	Monthly	Daily	Units	of Analysis	Type
Flow	(report)	(report)	MGD	---	---	---	2×Weekly	Report Total Daily Flow
Total Residual Chlorine	---	---	---	---	(report)	mg/l	Weekly	Grab
Oil & Grease	---	---	---	---	(report)	mg/l	Monthly	Grab
Total Cadmium	---	---	---	---	(report)	µg/l	Monthly	Grab
Temperature	---	---	---	(report)	(report)	°F	2×Weekly	Grab
Outfall Observation	(report)	---	---	---	---	---	Daily	Visual

a. Narrative Standard
The receiving water shall contain no unnatural turbidity, color, oil films, floating solids, foams, settleable solids, suspended solids, or deposits as a result of this discharge which are or may become injurious to any designated use.

b. Monitoring Location
Samples, measurements, and observations taken in compliance with the monitoring requirements above shall be taken at Monitoring Point 04E0 prior to discharge to the Roulo Creek Enclosure.

c. Outfall Observation
Any unusual characteristics of the discharge (i.e., unnatural turbidity, color, oil film, floating solids, foams, settleable solids, suspended solids, or deposits) shall be reported within 24 hours to the Southeast Michigan District Supervisor of the Surface Water Quality Division followed with a written report within five (5) days detailing the findings of the investigation and the steps taken to correct the condition.

d. Analytical Testing
Monitoring and analyses for total cadmium shall be conducted in accordance with U.S. EPA Method 213.2. Monitoring and analyses for total residual chlorine (TRC) shall be conducted in accordance with U.S. EPA Method 330.1 or through use of Orion Electrode Model 97-70. Alternate test methods may be used upon approval of the Southeast Michigan District Supervisor of the Surface Water Quality Division.

e. Water Treatment Additives
This permit does not authorize the discharge of water additives without approval from the Department. Approval of water additives is authorized under separate correspondence. Water additives include any material that is added to water used at the facility or to a wastewater generated by the facility to condition or treat the water. In the event a permittee proposes to discharge water additives, including an increased discharge concentration of a previously approved water additive, the permittee shall submit a request to the Department for approval. See Part I.A.13. for information on requesting water treatment additive use.

PART I

Section A. Limitations and Monitoring Requirements

12. Final Effluent Limitations, Monitoring Point 006A

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge a maximum of one hundred sixty-three million (163,000,000) gallons per day of noncontact cooling water, treated process wastewater, and miscellaneous low volume wastewaters including demineralizer regeneration wastewater and boiler blowdown from Monitoring Point 006A through Outfall 006 to the Rouge River (also see Part I.A.12.b., below). Such discharge shall be limited and monitored by the permittee as specified below.

	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration			Frequency	Sample
Parameter	Monthly	Daily	Units	Monthly	Daily	Units	of Analysis	Type
Flow	(report)	(report)	MGD	---	---	---	Daily	Report Total Daily Flow
Total Residual Chlorine (TRC)								
through September 30, 2004	---	---	---	---	(report)	µg/l	Daily	Grab
beginning October 1, 2004								
Continuous TRC Discharge	(greater than 160 min/day)		---	---	38	µg/l	Daily	Grab
Intermittent TRC Discharge	(less than/equal to 160 min/day)			---	200	µg/l	Daily	Grab
TRC Discharge Time	---	---	---	---	(report)	min/day	Daily	Report Total Discharge Time
Temperature	---	---	---	(report)	(report)	°F	3×Weekly	Reading
Total Copper	---	---	---	---	(report)	µg/l	Monthly	24-Hr Composite
Total Cadmium	---	---	---	---	(report)	µg/l	Monthly	24-Hr Composite
				Minimum Daily	Maximum Daily			
Dissolved Oxygen								
May – September	---	---	---	(report)	---	mg/l	Weekly	Grab
October – April	no monitoring required		---	---	---	---	---	---
pH	---	---	---	6.5	9.0	S.U.	Daily	Grab
Outfall Observation	(report)	---	---	---	---	---	Daily	Visual

a. Narrative Standard
The receiving water shall contain no unnatural turbidity, color, oil films, floating solids, foams, settleable solids, or deposits as a result of this discharge.

b. Authorized Combined Maximum Flow from Monitoring Point 004B and Monitoring Point 006A
The combined discharge flow rate from Monitoring Point 004B and Monitoring Point 006A shall not exceed four hundred forty million (440,000,000) gallons per day.

c. Monitoring Location
Samples, measurements, and observations taken in compliance with the monitoring requirements above shall be taken at Monitoring Point 006A prior to discharge to the Rouge River.

d. Outfall Observation
Any unusual characteristics of the discharge (i.e., unnatural turbidity, color, oil film, floating solids, foams, settleable solids, suspended solids, or deposits) shall be reported within 24 hours to the Southeast Michigan District Supervisor of the Surface Water Quality Division followed with a written report within five (5) days detailing the findings of the investigation and the steps taken to correct the condition.

PART I

Section A. Limitations and Monitoring Requirements

e. Total Residual Chlorine Requirements

Total Residual Chlorine (TRC) shall be analyzed for using EPA Method 330.1 or Orion Electrode Model 97-70 (alternate methods may be used upon approval of the Southeast Michigan District Supervisor of the Surface Water Quality Division). If chlorine discharge is intermittent, TRC monitoring is only required during periods of chlorine use and subsequent discharge. Limitations for the intermittent discharge of chlorine apply only when the discharge of chlorine is less than or equal to 160 minutes per day, otherwise the limitations for continuous discharge of chlorine apply.

During the intermittent discharge of chlorine, the daily concentration value reported for TRC shall be the average of a minimum of three (3) equally spaced grab samples taken during a chlorine discharge event, with the additional limitation that no single sample may exceed 300 µg/l. The permittee shall enter a zero ("0") on the Discharge Monitoring Report for the TRC discharge modes not being used.

The permittee may use dechlorination techniques to achieve the applicable TRC limitations, using sodium thiosulfate, sodium sulfite, sodium bisulfite, or other dechlorinating reagents approved by the Southeast Michigan District Supervisor. The quantity of reagent(s) used shall be limited to 1.5 times the stoichiometric amount of applied chlorine. Each month the permittee shall report the quantity of each dechlorination reagent used per day.

f. Analytical Testing

Monitoring and analyses for total copper shall be conducted in accordance with U.S. EPA Method 220.2. Monitoring and analyses for total cadmium shall be conducted in accordance with U.S. EPA Method 213.2. Alternate test methods may be used upon approval of the Southeast Michigan District Supervisor of the Surface Water Quality Division.

g. Water Treatment Additives

This permit does not authorize the discharge of water additives without approval from the Department. Approval of water additives is authorized under separate correspondence. Water additives include any material that is added to water used at the facility or to a wastewater generated by the facility to condition or treat the water. In the event a permittee proposes to discharge water additives, including an increased discharge concentration of a previously approved water additive, the permittee shall submit a request to the Department for approval. See Part I.A.13. for information on requesting water treatment additive use.

h. Monitoring Frequency Reduction for Total Cadmium and Total Copper

After the submittal of eighteen months of data, the permittee may request a reduction in monitoring frequency for total cadmium and/or total copper. This request shall contain an explanation as to why the reduced monitoring is appropriate and shall be submitted to the Southeast Michigan District Supervisor of the Surface Water Quality Division. Upon receipt of written approval and consistent with such approval, the permittee may reduce the monitoring frequency indicated in Part I.A.12. of this permit. The monitoring frequency for total cadmium and/or total copper shall not be reduced to less than annually. The Southeast Michigan District Supervisor may revoke the approval for reduced monitoring at any time upon notification to the permittee.

PART I

Section A. Limitations and Monitoring Requirements

13. Request for Discharge of Water Treatment Additives

In the event a permittee proposes to discharge water additives, the permittee shall submit a request to discharge water additives to the Department for approval. Such requests shall be sent to the Great Lakes and Environmental Assessment Section, Surface Water Quality Division, Department of Environmental Quality, P.O. Box 30273, Lansing, Michigan 48909, with a copy to the Southeast Michigan District Supervisor. Instructions to submit a request electronically may be obtained via the Internet (http://www.deq.state.mi.us/swq/gleas/gleas.htm under SITE LINKS/Water Treatment Additives). Written approval from the Department to discharge such additives at specified levels shall be obtained prior to discharge by the permittee. Additional monitoring and reporting may be required as a condition for the approval to discharge the additive.

A request to discharge water additives shall include all of the following water additive usage and discharge information:

a. Material Safety Data Sheet;

b. the proposed water additive discharge concentration;

c. the discharge frequency (i.e., number of hours per day and number of days per year);

d. the monitoring point from which the product is to be discharged;

e. the type of removal treatment, if any, that the water additive receives prior to discharge;

f. product function (i.e. microbiocide, flocculant, etc.);

g. a 48-hour LC_{50} or EC_{50} for a North American freshwater planktonic crustacean (either *Ceriodaphnia sp., Daphnia sp., or Simocephalus sp.*); and

h. the results of a toxicity test for one other North American freshwater aquatic species (other than a planktonic crustacean) that meets a minimum requirement of Rule 323.1057(2) of the Water Quality Standards.

Prior to submitting the request, the permittee may contact the Great Lakes and Environmental Assessment Section by telephone at 517-335-4184 or via the Internet (http://www.deq.state.mi.us/swq/gleas/gleas.htm under SITE LINKS/Water Treatment Additives) to determine if the Department has the product toxicity data required by items g and h above. If the Department has the data, the permittee will not need to submit product toxicity data.

14. Short Term Waste Characterization Study

As a condition of this permit, the permittee shall monitor the discharge from Monitoring Point 001A for the constituents, at the frequency, duration and quantification level specified below. This monitoring is designed to determine whether these constituents are discharged in significant quantities. The results of the analyses of such monitoring shall be submitted to the Southeast Michigan District Supervisor of the Surface Water Quality Division by January 2, 2002. If, upon review of the analysis, it is determined that any of the materials or constituents require limiting to protect the receiving waters in accordance with applicable water quality standards, the permit may then be modified by the Michigan Department of Environmental Quality in accordance with applicable laws and rules.

Constituent	Sample Type	Sample Frequency	Sample Duration	Quantification Level
Bis (2-ethylhexyl) phthalate	Grab	Weekly	8 Weeks	< 3 µg/l

PART I

Section A. Limitations and Monitoring Requirements

15. Storm Water Pollution Prevention Plan

The permittee is authorized to discharge storm water associated with industrial activities as defined in 40 CFR 122.26(b)(14). These storm water discharges shall be controlled in accordance with the requirements of this special condition. The permittee has developed and implemented a Storm Water Pollution Prevention Plan (plan). The permittee shall continue implementation of the plan for maximum control of significant materials (as defined in Part I.A.15.i.) so that storm water discharges will not cause a violation of the Water Quality Standards. The plan shall be routinely reviewed and updated in accordance with the requirements of this Special Condition.

a. Source Identification

To identify potential sources of significant materials that can enter storm water and subsequently be discharged from the facility, the plan shall, at a minimum, include the following:

1) A site map identifying the following: buildings and other permanent structures; storage or disposal areas for significant materials; secondary containment structures; storm water discharge outfalls (numbered for reference); location of storm water inlets contributing to each outfall; location of NPDES permitted discharges other than storm water; outlines of the drainage areas contributing to each outfall; structural runoff controls or storm water treatment facilities; areas of vegetation; areas of exposed and/or erodible soils; impervious surfaces (roofs, asphalt, concrete); name and location of receiving water(s); and areas of known or suspected impacts on surface waters as designated under Part 201 (Environmental Response) of the Michigan Act.

2) A list of all significant materials that could enter storm water. For each material listed, the plan shall include the following descriptions:

a) ways in which each type of material has been or has reasonable potential to become exposed to storm water (e.g., spillage during handling; leaks from pipes, pumps, and vessels; contact with storage piles; waste handling and disposal; deposits from dust or overspray, etc.);

b) identification of the outfall or outfalls through which the material may be discharged if released;

c) a listing of oil and materials on the Critical Materials Register that have been spilled or leaked over the three (3) years prior to the completion of the plan; the date, volume and exact location of release; and the action taken to clean up the material and/or prevent exposure to storm water runoff or contamination of surface waters of the state. Any release that occurs after the plan has been developed shall be controlled in accordance with the plan and is cause for the plan to be updated as appropriate within 14 calendar days of obtaining knowledge of the spill or loss; and

d) a summary of existing storm water discharge sampling data (if available) describing pollutants in storm water discharges associated with industrial activity at the facility. This summary shall be accompanied by a description of the suspected source(s) of the pollutants detected.

3) An evaluation of the reasonable potential for contribution of significant materials to runoff from at least the following areas or activities: loading, unloading, and other material handling operations; outdoor storage, including secondary containment structures; outdoor manufacturing or processing activities; significant dust or particulate generating processes; discharge from vents, stacks and air emission controls; on-site waste disposal practices; maintenance and cleaning of vehicles, machines and equipment; sites of exposed and/or erodible soil; sites of environmental contamination listed under Part 201 (Environmental Response) of the Michigan Act; areas of significant material residue; and other areas where storm water may contact significant materials.

PART I

Section A. Limitations and Monitoring Requirements

b. Preventive Measures and Source Controls, Non-Structural
To prevent significant materials from contacting storm water at the source, the plan shall, at a minimum, include the following non-structural controls:

1) Description of a program for routine preventive maintenance which includes requirements for inspection and maintenance of storm water management and control devices (e.g., cleaning of oil/water separators and catch basins) as well as inspecting and testing plant equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters. A log of the inspection and corrective actions shall be maintained on file by the permittee, and shall be retained in accordance with Part I.A.15.f.

2) A schedule for comprehensive site inspection to include visual inspection of equipment, plant areas, and structural pollution prevention and treatment controls to be performed at least once every six (6) months. A report of the results of the comprehensive site inspection shall be prepared and retained in accordance with Part I.A.15.f. The report shall identify any incidents of non-compliance with the plan. If there are no reportable incidents of non-compliance, the report shall contain a certification that the facility is in compliance with this plan.

3) A description of good housekeeping procedures to maintain a clean, orderly facility.

4) A description of material handling procedures and storage requirements for significant materials. Equipment and procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The procedures shall identify measures to prevent the spilled materials from being discharged into storm water. The plan may include, by reference, requirements of either a Pollution Incident Prevention Plan (PIPP) prepared in accordance with the Part 5 Rules (Rules 323.1151 through 323.1169 of the Michigan Administrative Code); a Hazardous Waste Contingency Plan prepared in accordance with 40 CFR 264 and 265 Subpart D, as required by Part 111 of the Michigan Act; or a Spill Prevention Control and Countermeasure (SPCC) plan prepared in accordance with 40 CFR 112.

5) Identification of areas that, due to topography, activities, or other factors, have a high potential for significant soil erosion. The plan shall also identify measures used to control soil erosion and sedimentation.

6) A description of employee training programs which will be implemented to inform appropriate personnel at all levels of responsibility of the components and goals of the plan. The plan shall identify periodic dates for such training.

7) Identification of significant materials expected to be present in storm water discharges following implementation of non-structural preventative measures and source controls.

c. Structural Controls for Prevention and Treatment
Where implementation of the measures required by Part I.A.15.b. does not control storm water discharges in accordance with Water Quality Standards in Part I.A.15.h., the plan shall provide a description of the location, function, and design criteria of structural controls for prevention and treatment. Structural controls may be necessary:

1) to prevent uncontaminated storm water from contacting or being contacted by significant materials, and/or

2) if preventive measures are not feasible or are inadequate to keep significant materials at the site from contaminating storm water. Structural controls shall be used to treat, divert, isolate, recycle, reuse or otherwise manage storm water in a manner that reduces the level of significant materials in the storm water and provides compliance with the Water Quality Standards in accordance with Part I.A.15.h.

d. Keeping Plans Current
1) The permittee shall review the plan on or before February 1 of each year, and maintain written summaries of the reviews. Based on the review, the permittee shall amend the plan as needed to ensure continued compliance with the terms and conditions of this permit.

PART I

Section A. Limitations and Monitoring Requirements

2) The plan shall also be updated or amended whenever changes or spills at the facility increase or have the potential to increase the exposure of significant materials to storm water, or when the plan is determined by the permittee or the Southeast Michigan District Supervisor of the Surface Water Quality Division to be ineffective in achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. Updates based on increased activity at the facility shall include a description of how the permittee intends to control any new sources of significant materials or respond to and prevent spills in accordance with the requirements of Parts I.A.15.a., I.A.15.b., and I.A.15.c.

3) The Southeast Michigan District Supervisor or authorized representative may notify the permittee at any time that the plan does not meet minimum requirements. Such notification shall identify why the plan does not meet minimum requirements. The permittee shall make the required changes to the plan within 30 days after such notification from the Southeast Michigan District Supervisor or authorized representative, and shall submit to the Southeast Michigan District Supervisor a written certification that the requested changes have been made.

e. Certified Storm Water Operator Update
If the certified operator has changed or an additional certified storm water operator is added, the permittee shall provide the name and certification number of the new operator to the Southeast Michigan District Supervisor. The new operator shall review and sign the plan.

f. Signature and Plan Review
1) The plan shall be signed by the certified storm water operator and by either the permittee or an authorized representative in accordance with 40 CFR 122.22. The plan shall be retained on site of the facility that generates the storm water discharge.

2) The permittee shall make plans, reports, log books, runoff quality data, and supporting documents available upon request to the Southeast Michigan District Supervisor of the Surface Water Quality Division or authorized representative.

g. Record Keeping
The permittee shall maintain records of all inspection and maintenance activities. Records shall also be kept describing incidents such as spills or other discharges that can affect the quality of storm water runoff. All such records shall be retained for three (3) years.

h. Water Quality Standards
At the time of discharge, there shall be no violation of the Water Quality Standards in the receiving waters as a result of this discharge. This requirement includes, but is not limited to, the following conditions:

1) In accordance with Rule 323.1050 of the Water Quality Standards, the receiving waters shall not have any of the following unnatural physical properties in quantities which are or may become injurious to any designated use: unnatural turbidity, color, oil film, floating solids, foams, settleable solids, suspended solids, or deposits as a result of this discharge.

2) Any unusual characteristics of the discharge (i.e., unnatural turbidity, color, oil film, floating solids, foams, settleable solids, suspended solids, or deposits) shall be reported within 24 hours to the Southeast Michigan District Supervisor of the Surface Water Quality Division followed with a written report within five (5) days detailing the findings of the investigation and the steps taken to correct the condition.

i. Significant Materials
Significant Materials means any material which could degrade or impair water quality, including but not limited to: raw materials; fuels; salt; solvents; detergents; plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (see 40 CFR 372.65); any chemical the facility is required to report pursuant to Section 313 of Emergency Planning and Community Right-to-Know Act (EPCRA); any material on the Critical Materials Register pursuant to Section 3111 of the Michigan Act; Hazardous Wastes as defined in Part 111 of the Michigan Act; fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharges.

PART I

Section A. Limitations and Monitoring Requirements

j. Prohibition of Non-storm Water Discharges

Discharges of material other than storm water shall be in compliance with an NPDES permit issued for the discharge. Storm water shall be defined to include the following non-storm water discharges provided pollution prevention controls for the non-storm water component are identified in the plan: discharges from fire hydrant flushing, potable water sources including water line flushing, fire system test water, irrigation drainage, lawn watering, routine building wash down which does not use detergents or other compounds, pavement wash water where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material have been removed) and where detergents are not used, air conditioning condensate, springs, uncontaminated groundwater, and foundation or footing drains where flows are not contaminated with process materials such as solvents. Discharges from fire fighting activities are authorized by this permit, but do not have to be identified in the plan.

PART II

Section A. Definitions

This list of definitions may include terms not applicable to this permit.

Acute toxic unit (TU_a) means $100/LC_{50}$ where the LC_{50} is determined from a whole effluent toxicity (WET) test which produces a result that is statistically or graphically estimated to be lethal to 50% of the test organisms.

Bioaccumulative chemical of concern (BCC) means a chemical which, upon entering the surface waters, by itself or as its toxic transformation product, accumulates in aquatic organisms by a human health bioaccumulation factor of more than 1000 after considering metabolism and other physiochemical properties that might enhance or inhibit bioaccumulation. The human health bioaccumulation factor shall be derived according to R 323.1057(5). Chemicals with half-lives of less than 8 weeks in the water column, sediment, and biota are not BCCs. The minimum bioaccumulation concentration factor (BAF) information needed to define an organic chemical as a BCC is either a field-measured BAF or a BAF derived using the biota-sediment accumulation factor (BSAF) methodology. The minimum BAF information needed to define an inorganic chemical as a BCC, including an organometal, is either a field-measured BAF or a laboratory-measured bioconcentration factor (BCF). The BCCs to which these rules apply are identified in Table 5 of R 323.1057 of the Water Quality Standards.

Biosolids are the solid, semisolid, or liquid residues generated during the treatment of sanitary sewage or domestic sewage in a treatment works. This includes, but is not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment processes and a derivative of the removed scum or solids.

Bulk biosolids means biosolids that are not sold or given away in a bag or other container for application to a lawn or home garden.

Chronic toxic unit (TU_c) means 100/MATC or $100/IC_{25}$, where the maximum acceptable toxicant concentration (MATC) and IC_{25} are expressed as a percent effluent in the test medium.

Class B Biosolids refers to material that has met the Class B pathogen reduction requirements or equivalent treatment by a Process to Significantly Reduce Pathogens (PSRP) in accordance with the Part 24 Rules. Processes include aerobic digestion, composting, anaerobic digestion, lime stabilization and air drying.

Daily concentration is the sum of the concentrations of the individual samples of a parameter divided by the number of samples taken during any calendar day. If the parameter concentration in any sample is less than the quantification limit, regard that value as zero when calculating the daily concentration. The daily concentration will be used to determine compliance with any maximum and minimum daily concentration limitations (except for pH and dissolved oxygen). When required by the permit, report the maximum calculated daily concentration for the month in the "MAXIMUM" column under "QUALITY OR CONCENTRATION" on the Discharge Monitoring Reports (DMRs).

For pH, report the maximum value of any individual sample taken during the month in the "MAXIMUM" column under "QUALITY OR CONCENTRATION" on the DMRs and the minimum value of any individual sample taken during the month in the "MINIMUM" column under "QUALITY OR CONCENTRATION" on the DMRs. For dissolved oxygen, report the minimum concentration of any individual sample in the "MINIMUM" column under "QUALITY OR CONCENTRATION" on the DMRs.

Daily loading is the total discharge by weight of a parameter discharged during any calendar day. This value is calculated by multiplying the daily concentration by the total daily flow and by the appropriate conversion factor. The daily loading will be used to determine compliance with any maximum daily loading limitations. When required by the permit, report the maximum calculated daily loading for the month in the "MAXIMUM" column under "QUANTITY OR LOADING" on the DMRs.

Department means the Michigan Department of Environmental Quality.

Detection Level means the lowest concentration or amount of the target analyte that can be determined to be different from zero by a single measurement at a stated level of probability.

District Supervisor: The Southeast Michigan District Supervisor of the Surface Water Quality Division is located at the Southeast Michigan District Office-DEQ, Surface Water Quality Division, 38980 Seven Mile Road, Livonia, Michigan 48152-1006, telephone: 734-953-1451 (fax: 734-953-1467).

PART II

Section A. Definitions

Division of Health Facility Services -- Health Facility Evaluation Section, Michigan Department of Consumer and Industry Services mailing address is P.O. Box 30195, Lansing, Michigan 48909.

Drinking Water and Radiological Protection Division -- Environmental Health, Michigan Department of Environmental Quality mailing address is P.O. Box 30630, Lansing, Michigan 48909-8130.

EC_{50} means a statistically or graphically estimated concentration that is expected to cause 1 or more specified effects in 50% of a group of organisms under specified conditions.

Fecal coliform bacteria monthly is the geometric mean of the samples collected in a calendar month (or 30 consecutive days). The calculated monthly value will be used to determine compliance with the maximum monthly fecal coliform bacteria limitations. When required by the permit, report the calculated monthly value in the "AVERAGE" column under "QUALITY OR CONCENTRATION" on the DMRs.

Fecal coliform bacteria 7-day is the geometric mean of the samples collected in any 7-day period. The calculated 7-day value will be used to determine compliance with the maximum 7-day fecal coliform bacteria limitations. When required by the permit, report the maximum calculated 7-day concentration for the month in the "MAXIMUM" column under "QUALITY OR CONCENTRATION" on the DMRs.

Flow Proportioned sample is a composite sample with the sample volume proportional to the effluent flow.

Grab sample is a single sample taken at neither a set time nor flow.

IC_{25} means the toxicant concentration that would cause a 25% reduction in a nonquantal biological measurement for the test population.

Interference is a discharge which, alone or in conjunction with a discharge or discharges from other sources, both:
1) inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
2) therefore, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or, of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent state or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including state regulations contained in any state sludge management plan prepared pursuant to Subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act. [This definition does not apply to sample matrix interference.]

Land Application means spraying or spreading biosolids or a biosolids derivative onto the land surface, injecting below the land surface, or incorporating into the soil so that the biosolids or biosolids derivative can either condition the soil or fertilize crops or vegetation grown in the soil.

LC_{50} means a statistically or graphically estimated concentration that is expected to be lethal to 50% of a group of organisms under specified conditions.

Maximum acceptable toxicant concentration (MATC) means the concentration obtained by calculating the geometric mean of the lower and upper chronic limits from a chronic test. A lower chronic limit is the highest tested concentration that did not cause the occurrence of a specific adverse effect. An upper chronic limit is the lowest tested concentration which did cause the occurrence of a specific adverse effect and above which all tested concentrations caused such an occurrence.

Monthly concentration is the sum of the daily concentrations determined during a reporting month (or 30 consecutive days) divided by the number of daily concentrations determined. The calculated monthly concentration will be used to determine compliance with any maximum monthly concentration limitations. When required by the permit, report the calculated monthly concentration in the "AVERAGE" column under "QUALITY OR CONCENTRATION" on the DMRs.

For minimum percent removal requirements, the monthly influent concentration and the monthly effluent concentration shall be determined. The calculated monthly percent removal, which is equal to 100 times the quantity [1 minus the quantity (monthly effluent concentration divided by the monthly influent concentration)], shall be reported in the "MINIMUM" column under "QUALITY OR CONCENTRATION" on the DMRs.

PART II

Section A. Definitions

Monthly loading is the sum of the daily loadings of a parameter divided by the number of daily loadings determined in the reporting month (or 30 consecutive days). The calculated monthly loading will be used to determine compliance with any maximum monthly loading limitations. When required by the permit, report the calculated monthly loading in the "AVERAGE" column under "QUANTITY OR LOADING" on the DMRs.

National Pretreatment Standards are the regulations promulgated by or to be promulgated by the Federal Environmental Protection Agency pursuant to Section 307(b) and (c) of the Federal Act. The standards establish nationwide limits for specific industrial categories for discharge to a POTW.

NOAEL means the highest tested dose or concentration of a substance that results in no observed adverse effect in exposed test organisms where higher doses or concentrations result in an adverse effect.

Noncontact Cooling Water is water used for cooling which does not come into direct contact with any raw material, intermediate product, by-product, waste product or finished product.

Nondomestic user is any discharger to a POTW that discharges wastes other than or in addition to water-carried wastes from toilet, kitchen, laundry, bathing or other facilities used for household purposes.

Pretreatment is reducing the amount of pollutants, eliminating pollutants, or altering the nature of pollutant properties to a less harmful state prior to discharge into a public sewer. The reduction or alteration can be by physical, chemical, or biological processes, process changes, or by other means. Dilution is not considered pretreatment unless expressly authorized by an applicable National Pretreatment Standard for a particular industrial category.

POTW is a publicly owned treatment works.

Quantification level means the measurement of the concentration of a contaminant obtained by using a specified laboratory procedure calculated at a specified concentration above the detection level. It is considered the lowest concentration at which a particular contaminant can be quantitatively measured using a specified laboratory procedure for monitoring of the contaminant.

Regional Administrator is the Region 5 Administrator, U.S. EPA, located at R-19J, 77 W. Jackson Blvd., Chicago, Illinois 60604.

7-day concentration is the sum of the daily concentrations determined during any 7 consecutive days in a reporting month divided by the number of daily concentrations determined. The calculated 7-day concentration will be used to determine compliance with any maximum 7-day concentration limitations. When required by the permit, report the maximum calculated 7-day concentration for the month in the "MAXIMUM" column under "QUALITY OR CONCENTRATION" on the DMRs.

7-day loading is the sum of the daily loadings of a parameter divided by the number of daily loadings determined during any 7 consecutive days in a reporting month. The calculated 7-day loading will be used to determine compliance with any maximum 7-day loading limitations. When required by the permit, report the maximum calculated 7-day loading for the month in the "MAXIMUM" column under "QUANTITY OR LOADING" on the DMRs.

Significant industrial user is a nondomestic user that: 1) is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; or 2) discharges an average of 25,000 gallons per day or more of process wastewater to a POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater); contributes a process wastestream which makes up five (5) percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the permittee as defined in 40 CFR 403.12(a) on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's treatment plant operation or violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Tier I value means a value for aquatic life, human health or wildlife calculated under R 323.1057 of the Water Quality Standards using a tier I toxicity database.

PART II

Section A. Definitions

Tier II value means a value for aquatic life, human health or wildlife calculated under R 323.1057 of the Water Quality Standards using a tier II toxicity database.

Toxicity Reduction Evaluation (TRE) means a site-specific study conducted in a stepwise process designed to identify the causative agents of effluent toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in effluent toxicity.

Water Quality Standards means the Part 4 Water Quality Standards promulgated pursuant to Part 31 of Act No. 451 of the Public Acts of 1994, as amended, being Rules 323.1041 through 323.1117 of the Michigan Administrative Code.

3-Portion Composite sample is a sample consisting of three equal volume grab samples collected at equal intervals over an 8-hour period.

24-Hour Composite sample is a flow proportioned composite sample consisting of hourly or more frequent portions that are taken over a 24-hour period.

PART II

Section B. Monitoring Procedures

1. Representative Samples

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Test Procedures

Test procedures for the analysis of pollutants shall conform to regulations promulgated pursuant to Section 304(h) of the Federal Act (40 CFR Part 136 - Guidelines Establishing Test Procedures for the Analysis of Pollutants). For parameters not specified in the permit or covered by the regulations, test procedures shall be submitted for approval to the Southeast Michigan District Supervisor of the Surface Water Quality Division.

The permittee shall periodically calibrate and perform maintenance procedures on all analytical instrumentation at intervals to ensure accuracy of measurements. The calibration and maintenance shall be performed as part of the permittee's laboratory Quality Control/Quality Assurance program.

3. Instrumentation

The permittee shall periodically calibrate and perform maintenance procedures on all monitoring instrumentation at intervals to ensure accuracy of measurements.

4. Recording Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information: 1) the exact place, date, and time of measurement or sampling; 2) the person(s) who performed the measurement or sample collection; 3) the dates the analyses were performed; 4) the person(s) who performed the analyses; 5) the analytical techniques or methods used; 6) the date of and person responsible for equipment calibration; and 7) the results of all required analyses.

5. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation shall be retained for a minimum of three (3) years, or longer if requested by the Regional Administrator or the Michigan Department of Environmental Quality.

PART II

Section C. Reporting Requirements

1. Start-up Notification

If the permittee will not discharge during the first 60 days following the effective date of this permit, the permittee shall notify the Southeast Michigan District Supervisor of the Surface Water Quality Division within 14 days following the effective date of this permit, and then 60 days prior to the commencement of the discharge.

2. Submittal Requirements for Self-Monitoring Data

Unless instructed on the effluent limits page to conduct "retained self-monitoring," the permittee shall submit self-monitoring data on the Environmental Protection Agency's Discharge Monitoring Report (DMR) forms (monthly summary information) and the Department's Daily Discharge Monitoring Report forms (daily information) to PCS-Data Entry, Surface Water Quality Division, Michigan Department of Environmental Quality, P.O. Box 30273, Lansing, Michigan, 48909-7773, for each calendar month of the authorized discharge period(s). The forms shall be postmarked no later than the 10th day of the month following each month of the authorized discharge period(s).

Alternative Daily Discharge Monitoring Report formats may be used if they provide equivalent reporting details and are approved by the Southeast Michigan District Supervisor of the Surface Water Quality Division. For information on electronic submittal of this information, contact the Southeast Michigan District Supervisor.

3. Retained Self-Monitoring Requirements

If instructed on the effluent limits page to conduct retained self-monitoring, the permittee shall maintain a year-to-date log of retained self-monitoring results and, upon request, provide such log for inspection to the staff of the Surface Water Quality Division, Michigan Department of Environmental Quality (in the case of Type I or Type II public water supplies, mobile home parks, campgrounds, and marinas, to the staff of the Drinking Water and Radiological Protection Division -- Environmental Health, Michigan Department of Environmental Quality, or, in the case of hospitals, nursing homes and extended care facilities, to the staff of the Division of Health Facility Services -- Health Facility Evaluation Section, Michigan Department of Consumer and Industry Services). Retained self-monitoring results are public information and shall be promptly provided to the public upon request.

The permittee shall certify, in writing, to the Southeast Michigan District Supervisor of the Surface Water Quality Division, on or before January 10th of each year, that: 1) all retained self-monitoring requirements have been complied with and a year-to-date log has been maintained; and 2) the application on which this permit is based still accurately describes the discharge.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report. Such increased frequency shall also be indicated.

Monitoring required pursuant to Part 41 of the Michigan Act or Rule 35 of the Mobile Home Park Commission Act (Act 96 of the Public Acts of 1987) for assurance of proper facility operation shall be submitted as required by the Department.

5. Compliance Dates Notification

Within 14 days of every compliance date specified in this permit, the permittee shall submit a written notification to the Southeast Michigan District Supervisor of the Surface Water Quality Division indicating whether or not the particular requirement was accomplished. If the requirement was not accomplished, the notification shall include an explanation of the failure to accomplish the requirement, actions taken or planned by the permittee to correct the situation, and an estimate of when the requirement will be accomplished. If a written report is required to be submitted by a specified date and the permittee accomplishes this, a separate written notification is not required.

PART II

Section C. Reporting Requirements

6. Noncompliance Notification

Compliance with all applicable requirements set forth in the Federal Act, Parts 31 and 41 of the Michigan Act, and related regulations and rules is required. All instances of noncompliance shall be reported as follows:

a. 24-hour reporting - Any noncompliance which may endanger health or the environment (including maximum daily concentration discharge limitation exceedances) shall be reported, verbally, within 24 hours from the time the permittee becomes aware of the noncompliance. A written submission shall also be provided within five (5) days.

b. other reporting - The permittee shall report, in writing, all other instances of noncompliance not described in a. above at the time monitoring reports are submitted; or, in the case of retained self-monitoring, within five (5) days from the time the permittee becomes aware of the noncompliance.

Written reporting shall include: 1) a description of the discharge and cause of noncompliance; and 2) the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and the steps taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

7. Spill Notification

The permittee shall immediately report any spill or loss of any product, by-product, intermediate product, oils, solvents, waste material, or any other polluting substance which occurs to the surface waters or groundwaters of the state by calling the Southeast Michigan District Supervisor of the Surface Water Quality Division at 734-953-1451, or if the notice is provided after regular working hours call the Department of Environmental Quality's 24-hour Pollution Emergency Alerting System telephone number, 1-800-292-4706 (calls from out-of-state dial 1-517-373-7660); and within ten (10) days of the spill or loss, the permittee shall submit to the Southeast Michigan District Supervisor of the Surface Water Quality Division a full written explanation as to the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken, and schedule of implementation.

8. Upset Noncompliance Notification

If a process "upset" (defined as an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee) has occurred, the permittee who wishes to establish the affirmative defense of upset, shall notify the Southeast Michigan District Supervisor of the Surface Water Quality Division by telephone within 24-hours of becoming aware of such conditions; and within five (5) days, provide in writing, the following information:

a. that an upset occurred and that the permittee can identify the specific cause(s) of the upset;

b. that the permitted wastewater treatment facility was, at the time, being properly operated; and

c. that the permittee has specified and taken action on all responsible steps to minimize or correct any adverse impact in the environment resulting from noncompliance with this permit.

In any enforcement proceedings, the permittee, seeking to establish the occurrence of an upset, has the burden of proof.

PART II

Section C. Reporting Requirements

9. Bypass Prohibition and Notification

a. Bypass Prohibition - Bypass is prohibited unless:

1) bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

2) there were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass; and

3) the permittee submitted notices as required under 9.b. or 9.c. below.

b. Notice of Anticipated Bypass - If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Southeast Michigan District Supervisor of the Surface Water Quality Division, if possible at least ten (10) days before the date of the bypass, and provide information about the anticipated bypass as required by the Southeast Michigan District Supervisor. The Southeast Michigan District Supervisor may approve an anticipated bypass, after considering its adverse effects, if it will meet the three (3) conditions listed in 9.a. above.

c. Notice of Unanticipated Bypass - The permittee shall submit notice to the Southeast Michigan District Supervisor of the Surface Water Quality Division of an unanticipated bypass by telephone at 734-953-1451 (if the notice is provided after regular working hours, use the following number: 1-800-292-4706) as soon as possible, but no later than 24 hours from the time the permittee becomes aware of the circumstances.

d. Written Report of Bypass - A written submission shall be provided within five (5) working days of commencing any bypass to the Southeast Michigan District Supervisor of the Surface Water Quality Division, and at additional times as directed by the Southeast Michigan District Supervisor. The written submission shall contain a description of the bypass and its cause; the period of bypass, including exact dates and times, and if the bypass has not been corrected, the anticipated time it is expected to continue; steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass; and other information as required by the Southeast Michigan District Supervisor.

e. Bypass Not Exceeding Limitations - The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of 9.a., 9.b., 9.c., and 9.d., above. This provision does not relieve the permittee of any notification responsibilities under Part II.C.10. of this permit.

f. Definitions

1) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

2) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

PART II

Section C. Reporting Requirements

10. Notification of Changes in Discharge

The permittee shall notify the Southeast Michigan District Supervisor of the Surface Water Quality Division, in writing, within 10 days of knowing, or having reason to believe, that any activity or change has occurred or will occur which would result in the discharge of: 1) detectable levels of chemicals on the current Michigan Critical Materials Register, priority pollutants or hazardous substances set forth in 40 CFR 122.21, Appendix D, or the Pollutants of Initial Focus in the Great Lakes Water Quality Initiative specified in 40 CFR 132.6, Table 6, which were not acknowledged in the application or listed in the application at less than detectable levels; 2) detectable levels of any other chemical not listed in the application or listed at less than detection, for which the application specifically requested information; or 3) any chemical at levels greater than five times the average level reported in the complete application submitted on March 30, 2001, as amended through September 6, 2001. Any other monitoring results obtained as a requirement of this permit shall be reported in accordance with the compliance schedules.

11. Changes in Facility Operations

Any anticipated action or activity, including but not limited to facility expansion, production increases, or process modification, which will result in new or increased loadings of pollutants to the receiving waters must be reported to the Southeast Michigan District Supervisor of the Surface Water Quality Division by a) submission of an increased use request (application) and all information required under Rule 323.1098 (Antidegradation) of the Water Quality Standards or b) by notice if the following conditions are met: 1) the action or activity will not result in a change in the types of wastewater discharged or result in a greater quantity of wastewater than currently authorized by this permit; 2) the action or activity will not result in violations of the effluent limitations specified in this permit; 3) the action or activity is not prohibited by the requirements of Part II.C.12.; and 4) the action or activity will not require notification pursuant to Part II.C.10. Following such notice, the permit may be modified according to applicable laws and rules to specify and limit any pollutant not previously limited.

12. Bioaccumulative Chemicals of Concern (BCC)

Consistent with the requirements of Rules 323.1098 and 323.1215 of the Michigan Administrative Code, the permittee is prohibited from undertaking any action that would result in a lowering of water quality from an increased loading of a BCC unless an increased use request and antidegradation demonstration have been submitted and approved by the Department.

13. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities from which the authorized discharge emanates, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Southeast Michigan District Supervisor of the Surface Water Quality Division 30 days prior to the actual transfer of ownership or control.

PART II

Section D. Management Responsibilities

1. Duty to Comply

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit.

It is the duty of the permittee to comply with all the terms and conditions of this permit. Any noncompliance with the Effluent Limitations, Special Conditions, or terms of this permit constitutes a violation of the Michigan Act and/or the Federal Act and constitutes grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of an application for permit renewal.

2. Operator Certification

The permittee shall have the waste treatment facilities under direct supervision of an operator certified at the appropriate level for the facility certification by the Michigan Department of Environmental Quality, as required by Sections 3110 and 4104 of the Michigan Act.

3. Facilities Operation

The permittee shall, at all times, properly operate and maintain all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures.

4. Power Failures

In order to maintain compliance with the effluent limitations of this permit and prevent unauthorized discharges, the permittee shall either:

a. provide an alternative power source sufficient to operate facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit; or

b. upon the reduction, loss, or failure of one or more of the primary sources of power to facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit, the permittee shall halt, reduce or otherwise control production and/or all discharge in order to maintain compliance with the effluent limitations and conditions of this permit.

5. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the surface waters or groundwaters of the state resulting from noncompliance with any effluent limitation specified in this permit including, but not limited to, such accelerated or additional monitoring as necessary to determine the nature and impact of the discharge in noncompliance.

6. Containment Facilities

The permittee shall provide facilities for containment of any accidental losses of concentrated solutions, acids, alkalies, salts, oils, or other polluting materials in accordance with the requirements of the Part 5 Rules (Rules 323.1151 through 323.1169 of the Michigan Administrative Code). For a Publicly Owned Treatment Work (POTW), these facilities shall be approved under Part 41 of the Michigan Act.

PART II

Section D. Management Responsibilities

7. Waste Treatment Residues

Residuals (i.e. solids, sludges, biosolids, filter backwash, scrubber water, ash, grit or other pollutants) removed from or resulting from treatment or control of wastewaters, shall be disposed of in an environmentally compatible manner and according to applicable laws and rules. These laws may include, but are not limited to, the Michigan Act, Part 31 for protection of water resources, Part 55 for air pollution control, Part 111 for hazardous waste management, Part 115 for solid waste management, Part 121 for liquid industrial wastes, Part 301 for protection of inland lakes and streams, and Part 303 for wetlands protection. Such disposal shall not result in any unlawful pollution of the air, surface waters or groundwaters of the state.

8. Treatment System Closure

In the event that discharges from a treatment system are planned to be eliminated, the permittee shall submit a closure plan to the Southeast Michigan District Supervisor for approval. The closure plan shall include characterization of any wastewater and residuals which will remain on-site after the discharges are eliminated, along with disposal methods, proposed schedule, and any other relevant information as required by the Southeast Michigan District Supervisor. Closure activities involving waste treatment residuals shall be consistent with Part II.D.7. of this permit.

The permittee shall implement the closure activities in accordance with the approved plan. Any wastewater or residual disposal inconsistent with the approved plan shall be considered a violation of this permit. After proper closure of the treatment system, this permit may be terminated.

9. Right of Entry

The permittee shall allow the Michigan Department of Environmental Quality, any agent appointed by the Department or the Regional Administrator, upon the presentation of credentials:

a. to enter upon the permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit; and

b. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect process facilities, treatment works, monitoring methods and equipment regulated or required under this permit; and to sample any discharge of pollutants.

10. Availability of Reports

Except for data determined to be confidential under Section 308 of the Federal Act and Rule 2128 (Rule 323.2128 of the Michigan Administrative Code), all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department and the Regional Administrator. As required by the Federal Act, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Federal Act and Sections 3112, 3115, 4106 and 4110 of the Michigan Act.

PART II

Section E. Activities Not Authorized by This Permit

1. Discharge to the Groundwaters

This permit does not authorize any discharge to the groundwaters. Such discharge may be authorized by a groundwater discharge permit issued pursuant to the Michigan Act.

2. Facility Construction

This permit does not authorize or approve the construction or modification of any physical structures or facilities. Approval for such construction for a POTW must be by permit issued under Part 41 of the Michigan Act. Approval for such construction for a mobile home park, campground or marina shall be from the Drinking Water and Radiological Protection Division -- Environmental Health, Michigan Department of Environmental Quality. Approval for such construction for a hospital, nursing home or extended care facility shall be from the Division of Health Facility Services -- Health Facility Evaluation Section, Michigan Department of Consumer and Industry Services upon request.

3. Civil and Criminal Liability

Except as provided in permit conditions on "Bypass" (Part II.C.9. pursuant to 40 CFR 122.41(m)), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance, whether or not such noncompliance is due to factors beyond the permittee's control, such as accidents, equipment breakdowns, or labor disputes.

4. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee may be subject under Section 311 of the Federal Act except as are exempted by federal regulations.

5. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Federal Act.

6. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize violation of any federal, state or local laws or regulations, nor does it obviate the necessity of obtaining such permits or approvals from other units of government as may be required by law.

STATE OF MICHIGAN

JOHN ENGLER, Governor

DEPARTMENT OF ENVIRONMENTAL QUALITY

"Better Service for a Better Environment"

HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

INTERNET: www.deq.state.mi.us

RUSSELL J. HARDING, Director

Rec'd 10-8-01

REPLY TO:

SURFACE WATER QUALITY DIVISION
KNAPPS CENTRE
PO BOX 30273
LANSING MI 48909-7773

October 1, 2001

CERTIFIED MAIL -- 7000 0520 0016 5014 0397

Rouge Steel Company
3001 Miller Road
P. O. Box 1699
Dearborn, Michigan 48121

Dear Sir or Madam:

SUBJECT: NPDES Permit No. MI0043524 -- Rouge Steel Co, 3001 Miller Road, Dearborn

Your National Pollutant Discharge Elimination System (NPDES) Permit has been processed in accordance with appropriate state and federal regulations. It contains the requirements necessary for you to comply with state and federal water pollution control laws.

REVIEW THE PERMIT EFFLUENT LIMITS AND COMPLIANCE SCHEDULES CAREFULLY. These are subject to the criminal and civil enforcement provisions of both state and federal law. Permit violations are audited by the Michigan Department of Environmental Quality and the United States Environmental Protection Agency and may appear in a published quarterly noncompliance report made available to agencies and the public.

Your monitoring and reporting responsibilities must be complied with in accordance with this permit. If applicable, Discharge Monitoring Report forms will be transmitted to you in the near future. These reports are to be submitted monthly or otherwise as required by your NPDES permit.

Any reports, notifications, or questions regarding the attached permit or NPDES program should be directed to the following address:

Ms. Teresa Seidel, District Supervisor
Southeast Michigan District Office, SWQD, DEQ
38980 Seven Mile Road
Livonia, Michigan 48152
Telephone: 734-953-1542

Sincerely,

William E. McCracken

William E. McCracken, P.E.
Chief, Permits Section
Surface Water Quality Division
517-373-8088

Attachment: Permit
cc: EPA-Region 5
208 Agency – Southeast Michigan Council of Governments
Ms. Teresa Seidel, Southeast Michigan District Supervisor, SWQD (2)
PCS Unit, SWQD (2)
Files

RSC 00549

EQP 0100e
(Rev. 1/98)

PERMIT NO. MI0043524

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et seq; the "Federal Act"), Michigan Act 451, Public Acts of 1994, as amended (the "Michigan Act"), Parts 31 and 41, and Michigan Executive Orders 1991-31, 1995-4 and 1995-18,

Rouge Steel Company
3001 Miller Road
P.O. Box 1699
Dearborn, Michigan 48121

is authorized to discharge from a facility located at

3001 Miller Road
Dearborn, Michigan 48121

designated as Rouge Steel Co

to the receiving water named the Rouge River in accordance with effluent limitations, monitoring requirements and other conditions set forth in this permit.

This permit takes effect on October 1, 2001. Any person who is aggrieved by this permit may file a sworn petition with the Office of Administrative Hearings of the Michigan Department of Environmental Quality, setting forth the conditions of the permit which are being challenged and specifying the grounds for the challenge. The Department may reject any petition filed more than 60 days after issuance as being untimely. If any condition of this permit is administratively challenged, the entire challenged permit is stayed and the previous permit will remain in effect until the Department takes final action after the Administrative Hearing.

This permit and the authorization to discharge shall expire at midnight, October 1, 2006. In order to receive authorization to discharge beyond the date of expiration, the permittee shall submit an application which contains such information and forms as are required by the Michigan Department of Environmental Quality to the Southeast Michigan District Supervisor of the Surface Water Quality Division by April 1, 2006.

In accordance with Section 324.3118 of the Michigan Act, the permittee shall make payment of a $200.00 annual storm water fee to the Department, which shall be postmarked no later than March 15 of each year.

This permit is based on a complete application submitted on March 30, 2001, as amended through September 6, 2001. The provisions of this permit are severable. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term in accordance with applicable laws and rules. On its effective date this permit shall supersede NPDES Permit No. MI0043524, expiring October 1, 2001.

Issued September 25, 2001

William E. McCracken
Chief, Permits Section
Surface Water Quality Division

RSC 00550

PART I

Section A. Limitations and Monitoring Requirements

1. Final Effluent Limitations, Monitoring Point 001A

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge a maximum of one hundred two million (102,000,000) gallons per day of treated process wastewater, contact cooling water, noncontact cooling water, and boiler blowdown; and an unspecified amount of stormwater runoff from Monitoring Point 001A through Outfall 001 to the Rouge River. Such discharge shall be limited and monitored by the permittee as specified below.

Parameter	Maximum Limits for Quantity or Loading Monthly	Daily	Units	Maximum Limits for Quality or Concentration Monthly	Daily	Units	Frequency of Analysis	Sample Type
Flow	(report)	(report)	MGD	---	---	---	2×Weekly	Report Total Daily Flow
Total Copper	14	---	lbs/day	16	---	µg/l	Weekly	24-Hr Composite
Oil & Grease	---	3,950	lbs/day	---	---	---	2×Weekly	Grab
Total Cadmium	---	---	---	---	(report)	µg/l	Monthly	24-Hr Composite
Temperature	---	---	---	(report)	(report)	°F	2×Weekly	Reading
al Residual Chlorine	---	---	---	---	(report)	µg/l	Weekly	Grab
				Minimum Daily	Maximum Daily			
Dissolved Oxygen								
May 1-Sept. 30	---	---	---	(report)	---	mg/l	Weekly	Grab
Oct. 1-April 30 (No Monitoring Required)		---	---	---	---	---	---	---
pH	---	---	---	6.5	9.0	S.U.	2×Weekly	Grab
Outfall Observation	(report)	---	---	---	---	---	Daily	Visual
				Maximum Monthly	Maximum Daily			
TIER 1 - FOR IRON MAKING MONTHLY AVERAGE PRODUCTION LESS THAN OR EQUAL TO 6400 TONS PER DAY, THE FOLLOWING LIMITATIONS APPLY:								
Total Suspended Solids	5,050	13,600	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Lead	7.3	22	lbs/day	10	(report)	µg/l	2×Weekly	24-Hr Composite
Total Zinc	8.1	28	lbs/day	(report)	(report)	µg/l	2×Weekly	24-Hr Composite
TIER 2 - FOR IRON MAKING MONTHLY AVERAGE PRODUCTION GREATER THAN 6400 TONS PER DAY AND LESS THAN OR EQUAL TO 7072 TONS PER DAY, THE FOLLOWING LIMITATIONS APPLY:								
tal Suspended Solids	5,090	13,700	lbs/day	---	---	---	2×Weekly	24-Hr Composite
al Lead	7.5	22	lbs/day	10	(report)	µg/l	2×Weekly	24-Hr Composite
Total Zinc	8.3	29	lbs/day	(report)	(report)	µg/l	2×Weekly	24-Hr Composite

PART I

Section A. Limitations and Monitoring Requirements

Parameter	Maximum Limits for Quantity or Loading: Monthly	Daily	Units	Maximum Limits for Quality or Concentration: Monthly	Daily	Units	Frequency of Analysis	Sample Type
TIER 3 - FOR IRON MAKING MONTHLY AVERAGE PRODUCTION GREATER THAN 7072 TONS PER DAY AND LESS THAN OR EQUAL TO 7744 TONS PER DAY, THE FOLLOWING LIMITATIONS APPLY:								
Total Suspended Solids	5,130	13,800	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Lead	7.6	23	lbs/day	10	(report)	µg/l	2×Weekly	24-Hr Composite
Total Zinc	8.5	29	lbs/day	(report)	(report)	µg/l	2×Weekly	24-Hr Composite
TIER 4 - FOR IRON MAKING MONTHLY AVERAGE PRODUCTION GREATER THAN 7744 TONS PER DAY, THE FOLLOWING LIMITATIONS APPLY:								
Total Suspended Solids	5,170	13,900	lbs/day	---	---	---	2×Weekly	24-Hr Composite
Total Lead	7.7	23	lbs/day	10	(report)	µg/l	2×Weekly	24-Hr Composite
Total Zinc	8.7	30	lbs/day	(report)	(report)	µg/l	2×Weekly	24-Hr Composite

a. Narrative Standard
The receiving water shall contain no unnatural turbidity, color, oil films, floating solids, foams, settleable solids, or deposits as a result of this discharge in quantities which are or may become injurious to any designated use.

b. Monitoring Location
Samples, measurements, and observations taken in compliance with the monitoring requirements above shall be taken at Monitoring Point 001A prior to discharge to the Rouge River.

c. Outfall Observation
Any unusual characteristics of the discharge (i.e., unnatural turbidity, color, oil film, floating solids, foams, settleable solids, suspended solids, or deposits) shall be reported within 24 hours to the Southeast Michigan District Supervisor of the Surface Water Quality Division followed with a written report within five (5) days detailing the findings of the investigation and the steps taken to correct the condition.

d. Water Treatment Additives
This permit does not authorize the discharge of water additives without approval from the Department. Approval of water additives is authorized under separate correspondence. Water additives include any material that is added to water used at the facility or to a wastewater generated by the facility to condition or treat the water. In the event a permittee proposes to discharge water additives, including an increased discharge concentration of a previously approved water additive, the permittee shall submit a request to the Department for approval. See Part I.A.13. for information on requesting water treatment additive use.

e. Analytical Testing
Monitoring and analyses for total lead shall be conducted in accordance with U.S. EPA Method 239.2. Monitoring and analyses for total zinc shall be conducted in accordance with U.S. EPA Method 200.7. Monitoring and analyses for total cadmium shall be conducted in accordance with U.S. EPA Method 213.2. Monitoring and analyses for total copper shall be conducted in accordance with U.S. EPA Test Method 220.2. Monitoring and analyses for total residual chlorine (TRC) shall be conducted in accordance with U.S. EPA Method 330.1 or through use of Orion Electrode Model 97-70.

Alternate test methods may be used upon approval of the Southeast Michigan District Supervisor of the Surface Water Quality Division.

PART I

Section A. Limitations and Monitoring Requirements

f. Effluent Loading Limitations for Total Suspended Solids, Total Lead, and Total Zinc
Effluent loading limitations for total suspended solids, total lead, and total zinc were calculated using a "water bubble" approach between Monitoring Points 001A and 04B1. Each tier for Monitoring Point 001A is based on the corresponding iron making production level for Monitoring Point 04B1 specified in Part I.A.6.

g. Production Tiers
Beginning on the effective date of this permit, the effluent limitations for tier 2 are in effect. If iron making monthly average production levels are expected to change, the permittee may request that effluent limitations in a different production tier become effective. To activate effluent limitations in a different production tier, the permittee shall notify the Southeast Michigan District Supervisor of the Surface Water Quality Division of the anticipated monthly average production level and the period which the permittee expects to operate at a different production level. A request for effluent limitations based on a different production level shall not be made more than once per quarter.

Upon approval of the Southeast Michigan District Supervisor, the treatment technology-based effluent limitations for the corresponding production level shall become effective. The permittee shall provide written verification to the Southeast Michigan District Supervisor that they have achieved the anticipated monthly average production level which activated the different production tier. The written verification shall be submitted within thirty days after the month in which the permittee expected to operate at the different production level. The permittee shall notify the Southeast Michigan District Supervisor in writing, if the actual production level is below the anticipated production level for three consecutive months. Effluent limitations for the actual production level shall then apply. If production levels decrease due to a blast furnace reline, effluent limitations for the iron making production tier in effect prior to the blast furnace reline shall apply.

h. Monitoring Frequency Reduction for Total Cadmium and/or Total Residual Chlorine
After the submittal of eighteen months of data (i.e., 18 cadmium samples/78 total residual chlorine samples), the permittee may request a reduction in monitoring frequency for total cadmium and/or total residual chlorine. This request shall contain an explanation as to why the reduced monitoring is appropriate and shall be submitted to the Southeast Michigan District Supervisor of the Surface Water Quality Division. Upon receipt of written approval and consistent with such approval, the permittee may reduce the monitoring frequency indicated in Part I.A.1. of this permit. The monitoring frequency for total cadmium and total residual chlorine shall not be reduced to less than annually. The Southeast Michigan District Supervisor may revoke the approval for reduced monitoring at any time upon notification to the permittee.

Michigan Department of Environmental Quality- Surface Water Quality Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III - Industrial and Commercial Wastewater

B. Outfall Information

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT or COC NUMBER	OUTFALL NUMBER
Rouge Steel Company	MI 0043524	001A

3. PROCESS STREAMS CONTRIBUTING TO OUTFALL DISCHARGE

This information is used to determine the applicable federal regulations for this discharge. The information required to be reported is dependent on the type of facility. Page 7 of the appendix contains an abbreviated list of various industries and the types of information each shall report in this application. Assistance can be received by calling the appropriate district office (see pages 2 and 3 of the appendix). All industries shall provide the name of each process and the Standard Industrial Classification (SIC) code for the process. If the wastestream is not regulated under federal categorical standards, the applicant shall report all pollutants which have the reasonable potential to be present in the discharge.

Make additional copies of this page if necessary.

PROCESS INFORMATION

A. Name of the process contributing to the discharge: Hot Strip Mill

B. SIC code: 3312

C. Describe the process and provide measures of production (see the instructions to determine the appropriate information to be reported):

Heated steel slabs are passed between rollers, increasing length, reducing thickness so they can be coiled. Production = 347,894 tons/month based on highest production month in the last 5 years

PROCESS INFORMATION

A. Name of the process contributing to the discharge: Pickle Lines

B. SIC code: 3316

C. Describe the process and provide measures of production (see the instructions to determine the appropriate information to be reported):

Oxides and scale are removed from surface of steel by immersion or "pickling" in acid/water solutions. Production = 230,400 tons/month based on highest production month in last 5 years

PROCESS INFORMATION

A. Name of the process contributing to the discharge: Tandem Mill

B. SIC code: 3316

C. Describe the process and provide measures of production (see the instructions to determine the appropriate information to be reported):

Cold coils of steel passed between successive rollers, reducing their thickness, then re-coiled. Production = 176,328 tons/month based on high production month in last 5 years.

PROCESS INFORMATION

A. Name of the process contributing to the discharge:

B. SIC code:

C. Describe the process and provide measures of production (see the instructions to determine the appropriate information to be reported):

PROCESS INFORMATION

A. Name of the process contributing to the discharge:

B. SIC code:

C. Describe the process and provide measures of production (see the instructions to determine the appropriate information to be reported):

PROCESS INFORMATION

A. Name of the process contributing to the discharge:

B. SIC code:

C. Describe the process and provide measures of production (see the instructions to determine the appropriate information to be reported):

Michigan Department of Environmental Quality- Surface Water Quality Division

WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION III - Industrial and Commercial Wastewater

B. Outfall Information

PLEASE TYPE OR PRINT

FACILITY NAME	NPDES PERMIT or COC NUMBER	OUTFALL NUMBER
Rouge Steel Company	MI 0043524	001B

3. PROCESS STREAMS CONTRIBUTING TO OUTFALL DISCHARGE

This information is used to determine the applicable federal regulations for this discharge. The information required to be reported is dependent on the type of facility. Page 7 of the appendix contains an abbreviated list of various industries and the types of information each shall report in this application. Assistance can be received by calling the appropriate district office (see pages 2 and 3 of the appendix). All industries shall provide the name of each process and the Standard Industrial Classification (SIC) code for the process. If the wastestream is not regulated under federal categorical standards, the applicant shall report all pollutants which have the reasonable potential to be present in the discharge.

Make additional copies of this page if necessary.

PROCESS INFORMATION

A. Name of the process contributing to the discharge: Tandem Mill

B. SIC code: 3316

C. Describe the process and provide measures of production (see the instructions to determine the appropriate information to be reported):

Cold coils of steel passed between successive rollers, reducing their thickness, then re-coiled. Production – 176,328 tons/month based on high production month in last 5 years.

PROCESS INFORMATION

A. Name of the process contributing to the discharge:

B. SIC code:

C. Describe the process and provide measures of production (see the instructions to determine the appropriate information to be reported):

PROCESS INFORMATION

A. Name of the process contributing to the discharge:

B. SIC code:

C. Describe the process and provide measures of production (see the instructions to determine the appropriate information to be reported):

PROCESS INFORMATION

A. Name of the process contributing to the discharge:

B. SIC code:

C. Describe the process and provide measures of production (see the instructions to determine the appropriate information to be reported):

PROCESS INFORMATION

A. Name of the process contributing to the discharge:

B. SIC code:

C. Describe the process and provide measures of production (see the instructions to determine the appropriate information to be reported):

PROCESS INFORMATION

A. Name of the process contributing to the discharge:

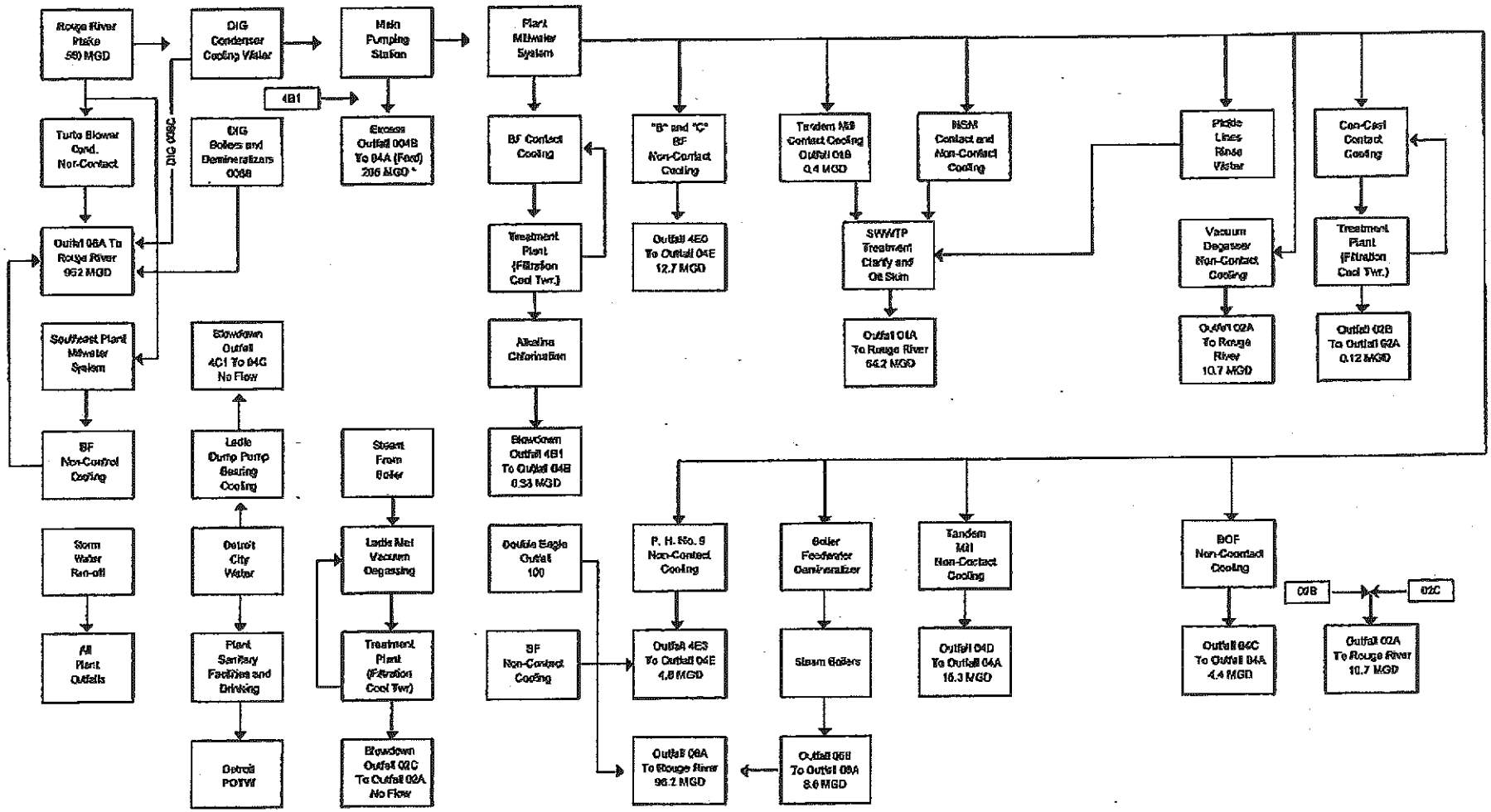
B. SIC code:

C. Describe the process and provide measures of production (see the instructions to determine the appropriate information to be reported):

RECEIVED

APR 17 2001

S.W.Q.D. - PERMITS



*Flow values computed as average for the DMR period 9/99 to 12/00. The exception is Outfall 004B which had no flow during this period due to the February 1999 powerhouse explosion. 004B value is forcasted average of expected flows.

Revision Date: 3/9/01

Rouge Steel Company
Dearborn, Michigan

Figure B-2: Sources of Discharge

LTI ENVIRONMENTAL ENGINEERING
A Division of Limno-Tech, Inc.
501 Avis Dr, Ann Arbor, Michigan 48108

LAWRENCE N. HALFEN, Ph.D.
ENVIRONMENTAL CONSULTATIONS
2487 CANDLEWICK COURT, SE
GRAND RAPIDS, MICHIGAN 49546

October 16, 2006

Ms. Anna Rzeznik **R5FOIA@EPA.gov**
FOIA Coordinator
US EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: Request for Documents under Freedom of Information

Dear Ms. Rzeznik:

This FOIA request is a supplemental request derived from the initial request made to your agency on June 4, 2006 (RIN: 01171 – 06). This initial FOIA request contained the following detail:

{On February 14, 2002, your agency over the signature of Lorna M. Jereza, P.E., sent an information request under Section 3007 of the Resource Conservation and Recovery Act to the Rouge Steel Company (US EPA ID Number MID 087 738 431) requesting information regarding the Schaefer Road Wastewater Treatment Plant to be submitted within 21 days. The request was to be administered by Diane Sharrow (312-886-6199).

I have discussed this request and the response that was provided by the Rouge Steel Company with Ms. Sharrow and she has indicated that this response is known to her as are additional responses to information requests made to this company regarding the Schaefer Road facility. She has indicated that this file is approximately 4 to 5 inches thick and that she has knowledge of its location so it could be accessed and copied.}

In response to this request and with the cooperation and assistance of Ms. Diane Sharrow and following legal review by Mr. James Cha, we received files that contained analytical data that was derived from a US EPA and US Fish and Wildlife Service sampling program that took place at the Rouge Steel/Severstal facility under court order in April of 2003. During this sampling program that was conducted, with Ms. Sharrow representing the USEPA at the site, she took written field notes and related field records of the activity at the Dearborn site that were not included in the response to the original FOIA request because her notes were not in the primary file dealing with this activity.

This current request is focused upon obtaining copies of the field notes, pictures, drawings, maps and related detail that were created by Ms. Sharrow as a result of her field activities associated with the sampling that took place at this site in April of 2003. I have discussed the availability of these records with Ms. Sharrow and she has indicated that she has access to these documents but that we must comply with the FOIA procedures to obtain copies. It should further be noted that we are fully aware that there are portions of the file on this site that Mr. Cha has determined to be held enforcement confidential. The materials that we are requesting are specifically related to the events of the day of the sampling and not involving any subsequent deliberations, work product or enforcement planning undertaken by the agency after that date.

Ms. Sharrow and Mr. Cha have been provided with copies of this request as a professional courtesy to facilitate the resolution of this matter.

Please send the records to the address shown at the top of this correspondence. In the event of any question regarding this request, my telephone number is (616) 949-7168. My e-mail address is LNHalfen@comcast.net.

I am prepared to cover reasonable duplication costs and shipping expenses up to a level of $500 with the understanding that if the expense is greater than this, that I should be contacted. If possible, I would request that once duplicated, the documents be sent by using whatever option is available that would expedite delivery. We are very interested in receiving these documents as soon as possible within the protocols of the FOIA program of your agency.

Thank you for your courtesy and attention to this request.

Kindly accept my very best wishes,

Sincerely,

Lawrence N. Halfen, Ph.D.

cc: Ms. Diane Sharrow, US EPA V
Mr. James Cha US EPA V, Assistant Regional Counsel

A.1.3

MID 087 738 431

United States Environmental Protection Agency
Region 5 77 West Jackson Blvd. Chicago, Illinois 60604
Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin

EPA **Environmental NEWS RELEASE**

Technical Contact: Diane Sharrow
(312) 886-6199

Legal Contact: Gaylene Vasaturo
(312) 886-1811

Media Contact: Karen Thompson
(312) 353-8547

For Immediate Release: March XX, 2000

No. 00-OPA0XX

EPA ORDERS ROUGE STEEL TO PROTECT MIGRATORY BIRDS

U.S. Environmental Protection Agency (EPA) Region 5 has recently ordered Rouge Steel Co.(Dearborn, MI), to protect migratory birds from oil waste in its oil polishing lagoons and clarifiers at its wastewater treatment plant on site.

EPA and U.S. Fish and Wildlife Service and EPA inspected the site on October 20, 1999 and found oily waste and the remains of a dead migratory bird in the lagoons at the Miller Road site. In the past, other oil-covered birds have been recovered from the lagoons and taken to the City of Dearborn for possible rehabilitation. Successful rehabilitation of oiled birds depends on many factors, including the amount of oiling, the age and species of the bird, and how long the bird has been oiled. Rouge

Steel has taken immediate steps to stop exposure by removing oil from the lagoons and using an air cannon at the wastewater treatment area.

- more -

EPA has met with Rouge to develop a long-term plan to protect wildlife at the site.

Under Federal law, EPA controls the handling, storage, treatment, transportation, and disposal of solid and hazardous wastes.

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United States
Environmental Protection
Agency

Region 5
77 West Jackson Blvd.
Chicago, Illinois 60604

Illinois, Indiana,
Michigan, Minnesota,
Ohio, Wisconsin

EPA **Environmental**
NEWS RELEASE

Technical Contact: Diane Sharrow
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For Immediate Release: March 16, 2000

No. 00-OPA042

EPA ORDERS ROUGE STEEL TO PROTECT MIGRATORY BIRDS

U.S. Environmental Protection Agency (EPA) Region 5 has recently ordered Rouge Steel Co.(Dearborn, MI), to protect migratory birds from oil waste at its wastewater treatment plant.

EPA and U.S. Fish and Wildlife Service and EPA inspected the Schaeffer Road area on October 20, 1999 and found oily waste and the remains of a dead migratory bird in the lagoons at the Miller Road site. In the past, other oil-covered birds have been rescued from the lagoons and taken to the City of Dearborn for possible rehabilitation. Successful rehabilitation of oiled birds depends on many factors including amount of oil, age and species of bird, and how long it has been oiled.

- more -

Rouge Steel has taken immediate steps to stop exposure by removing oil from the pond. EPA has met with Rouge to develop a long-term plan to protect wildlife at the site.

Under Federal law, EPA controls the handling, storage, treatment, transportation, and disposal of solid and hazardous wastes.

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BY MARILYN BERLIN SNELL

FYI - See Info on Severstal (Rouge Steel)

Fresh Air for South Dearborn

A reluctant activist fights for a healthy community

Yasser Maisari, 35, is a compact man with a big personality. Having grown up in south Dearborn, Michigan, with six siblings, including three older brothers, he describes himself as outspoken and impatient. "Once I see something's not right, it's very difficult to let go," Maisari says. Now he's a pharmacist and a father of three with a sweet nine-year-old named Yasmeen who, in her brief and embattled life, has already had a nearly fatal stroke, dozens of major hospitalizations, and a liver transplant. He's also a community activist and vice president of Concerned Residents of South Dearborn (CRSD).

"I have an immense amount of guilt," says Maisari, who came to the United States from Yemen as a baby. "I should be home teaching my daughter how to walk again. We had to teach her even how to blink again after the stroke. But instead of devoting my extra time to my family, I am going to meetings until midnight." As his wife, Christina, looks on—nodding in agreement when Maisari says, "I know those meetings drive her crazy"—he adds quickly, "But what do you do? Throw up your hands and give up? Be selfish? Or do you fight?"

"We are not asking for these facilities to be shut down," pharmacist and family man Yasser Maisari says. "But we want the right to coexist in a safe environment."

ELIZABETH CONLEY/DETROIT NEWS

Roughly 40,000 of Dearborn's 100,000 residents are of Arab descent, and most of them live in the southern part of town. Besides Paris, there is no greater concentration of Arabs and Muslims outside the Middle East. Many came in the post–World War II years, searching for good jobs and a better life provided by a booming automobile industry.

When they arrived, the Ford Motor Company's Rouge industrial complex was in full swing, employing nearly 100,000 workers spread out among 93 buildings. Built in the early 20th century at the confluence of the Rouge and Detroit Rivers, the 1,100-acre complex realized Henry Ford's dream of an all-in-one mass-production facility, where rubber, sand, coke, and coal went in one end and shiny new Fords came out the other. Between 1920 and 1950, it was

the largest industrial center in the world.

Over the years, the company has sold off parts of the sprawling complex, but it continues to buy the products—power, steel, and the like—produced there. In 2000, CEO and Chair William Clay Ford Jr. hired visionary eco-architect Bill McDonough to transform Ford-owned Rouge facilities, including its 1.3-million-square-foot assembly plant, into a showcase for environmental sustainability. Yet right alongside the company's impressive "Rouge Heritage Project," other facilities in the complex continue their noisy, toxic, Industrial Age operations.

According to the most recent data from the EPA, Wayne County, which includes Dearborn, is among the dirtiest 10 percent of U.S. counties in terms of air pollution. Its emissions include carbon monoxide, nitrogen oxide, sulfur dioxide, and particulate matter. In 2002, the EPA ranked Rouge's steel-manufacturing plant, which emits lead, nickel, and chromium compounds, among Wayne County's top polluters. Those three metals are all known carcinogens—hazardous to both ecosystems and human health.

The steel plant looms just beyond south Dearborn's Salina Elementary and Middle Schools; its hulking structure and corroded and spewing smokestacks offer an incongruous and disturbing backdrop to the children's playgrounds. The din from Rouge's power plant, across the street, is nearly constant. During the academic year, the teachers must often shout to be heard. The middle school has no air-conditioning, but even on sweltering days the windows stay closed to block out the noise.

"We are not asking for these facilities to be shut down," says Maisari. "But we want the right to coexist in a safe environment." When he took his grievances about noise and pollution to Dearborn's city council, however, one of its members told him to move if he didn't like it.

"We know we're going up against big business," Maisari says. "But it gets depressing when city officials and people who are supposed to represent the community either ignore you or tell you to move." Though he resists calling it racism, the label is hard to avoid. At a notorious 1999 city council meeting, for example, when a CRSD member raised environmental issues and complained that the city was neglecting its Arab-American community, Mayor Michael Guido snapped, "If your organization wanted to do something, you should work on trying to train the new immigrants to this country on personal hygiene and habits of cleanliness." (Guido was first elected in 1985 after promising to deal with Dearborn's "Arab problem." He's running for reelection this November.)

"Once I see something's not right, it's very difficult to let go."

With no politician willing to help, says Maisari, south Dearborn residents helped themselves.

In 2003, Maisari was part of a class-action lawsuit against Dearborn Industrial Generation—Rouge's 457-acre natural-gas-fired power plant across from the schools—for excessive noise. The lead plaintiff, Mohammed Ahmed, 55, is a long-time family friend, a mentor to Maisari, and a founding member of CRSD. After two years of legal wrangling, they finally won their case when the company agreed in August to fix the problem.

JEFFREY SAUGER

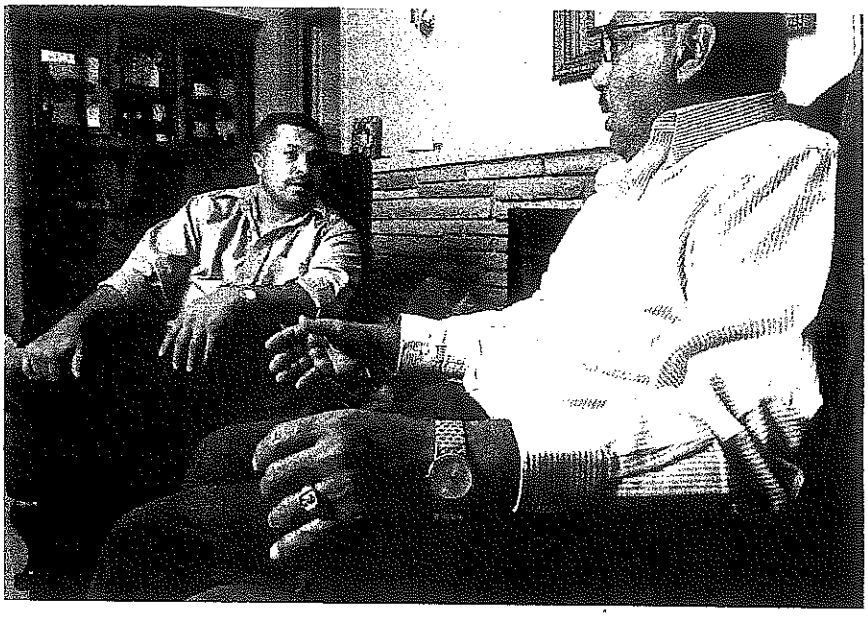
Obstacles to learning: Toxic air and deafening noise are part of the daily routine for more than 600 children at Salina Elementary School.

Maisari and Ahmed say that prior to the suit, they repeatedly asked Wayne County and Dearborn city officials to enforce noise restrictions on the power plant; they even called the police on evenings when the racket was unbearable or explosions at the facility woke them up. (The worst, an explosion and fire in 1999, killed six workers.) "I've gone to city council meetings and joked that we can sell tickets to watch the fireworks at that plant from all the explosions," Maisari says. "It's scary."

"Why should we have had to go to court on this?" asks Ahmed. "I feel ashamed to go to court. I don't want to go. I don't want to hire a lawyer. But where are our leaders? No one helps."

We are sitting in Ahmed's south Dearborn home with his wife, Ashwak, and son, Hadeer, drinking tea from delicate china cups. On the wall behind Ahmed, pages of the Koran are displayed in a frame. Across the street is the area's largest park, its playground equipment courtesy of another, less successful legal settlement. In that one, south Dearborn residents sued the Edward C. Levy Company, which processes slag from blast and steel furnaces, for air-quality violations. Besides the slides and swings, there is little to show for their effort, and neighbors still complain of pollution problems.

Though it's a pleasant summer evening—with children racing their bikes along the street, an intense basketball game going on in the park, and women in long skirts and head coverings talking to each other on the sidewalk—Ahmed's



Maisari and his mentor, Mohammed Ahmed (right). Since September 11, Ahmed says, it's been hard to get Arab Americans involved in the fight for clean air: "They are afraid to make waves."

windows are shut tight. The fan above us purrs. "The simple things, like open windows, we can't do," laments Ahmed, who lives less than half a mile from Rouge's steel mill. Even with them shut, he says, his wife must constantly clean to control the dust and flakes that fall from the air. He says the metallic "fleas" build up overnight on his car, home exterior, and porch chairs, as well as on area roads. These tiny pieces of graphite are released into the atmosphere during the steel-manufacturing process, when molten iron and slag are removed from the furnace to cool.

Trying to keep a clean home next to industrial behemoths may be a headache, but it's the particulate matter residents *can't* see that poses a greater health risk. Dearborn has exceeded the safe annual average for fine particulate matter since monitors were installed there in 1999. These particles, less than 2.5 microns thick (about one-thirtieth the width of a human hair), are mostly composed of ammonium sulfate, organic carbon, and ammonium nitrate. Exposure to them affects breathing and the lungs' defenses, aggravates respiratory and cardiovascular ailments, and has been linked to fatal heart and lung disease. The smaller the particles, the more deadly, since they can get deeper into the lungs and even into the bloodstream.

Maisari's wife, son, and father have chronic asthma. Ahmed has just begun

ROSH ISLAM

to use an inhaler. Still recovering from open-heart surgery, Ahmed—recently retired after 32 years as a millwright with Chrysler—jokes that "every time I visit the doctor, he says, 'Walk, Mohammed! You gotta exercise!' But what am I breathing? It might be worse than not walking."

Ahmed has been slowed by his health problems. But he continues to work the phone two to three hours a day, trying to get some relief for his community. He also attempts to document the problems. "I keep a log. Every day I write, 'yellow,' 'black,' 'smoke.' I have a camera to take pictures, but now I don't want to because people might come after me asking, 'Why you taking pictures?'" In the aftermath of the September 11 terrorist attacks, it's inadvisable for an Arab to be seen snapping photographs of power plants and other industrial facilities, even if he's just trying to protect the health and security of his neighbors. Ahmed adds that these days he is often afraid to let his adult children out of the house.

When he talks about what is happening to the Arab-American community of south Dearborn, Ahmed's frustration and even sadness are unmistakable. "I'm talking from my heart," he says with a distinct accent he's carried from Aden (now Yemen), which he left in 1969. "We are always having to fight. We don't want to shut off jobs. But we need something done."

Maisari, who has just put in a full day at the Kmart pharmacy where he works, listens respectfully to the man he refers to as Uncle Mo. "He is one of my idols, a perfect example of our elders, because of the sacrifices he's made for our community," says Maisari. The two men have an easy rapport. When it's clear that Ahmed is getting emotional about the emissions from the plants across the street, Maisari jumps in to lighten the conversation. He jokes about how pollution from the Rouge River may have changed local wildlife. "They might have ten feet and glow in the dark! We don't even want to approach a rabbit or squirrel because huge fangs might come out and chew us to death!"

Ahmed smiles, then adds, "We aren't politicians. We just help our area. We want these companies to go by the law or promise us when they are going to fix their problems."

"This is volunteer work," says Maisari. "The only good that has come from all this tragedy is that we now have collected the data to prove we have a problem here. It's not just a bunch of babbling idiots saying the air smells bad."

So now they're back in court. This year, Ahmed and Maisari are participating in another class-action suit—against Severstal, the Russian steel giant that purchased the bankrupt Rouge Steel Company in 2004.

The suit, filed by the environmental law firm Olson, Bzdok & Howard last December, charges that Severstal emits particulate matter and other air pollutants in violation of the Michigan Environmental Protection Act and at levels

well above the standard necessary to protect public health. The document also notes that south Dearborn residents have complained to regulatory agencies but have received no relief.

At 33, wearing flip-flops and jeans at his northern Michigan office, Chris Bzdok looks more like a surfer than a lawyer. He and his associate, T. J. Andrews, 31, investigated local residents' complaints and Severstal's emissions record for five months before deciding to take on the case. (If they win, they will seek to recover lawyers' fees. If they lose, the small firm will be out substantial expenses and time.) "Severstal inherited a [pollution] problem," says Bzdok, "but it also bought the company at a cut rate through a bankruptcy court" and was aware of the steelmaker's environmental run-ins with various state and federal agencies.

For example, in 2002, after it was sued by the EPA, Wayne County, and the Michigan Department of Environmental Quality, Rouge Steel agreed to reduce its emissions. "They were supposed to make changes," says Andrews. "But we don't think [the agreement] has been productive in terms of improving air quality." She adds that the pollution in south Dearborn "continues to affect residents' property as well as their use and enjoyment of it."

According to Robert McCann, spokesperson for the MDEQ, Severstal is heading in the right direction "but has not yet reached the goals identified in the agreement." Moreover, since November 2004, the company has been sent 16 "letters of violation" from the MDEQ for new abuses of air-quality regulations—some of which, says McCann, have still not been resolved.

Bad publicity from the lawsuit may just succeed where state and federal environmental agencies have failed. Last June, six months after the suit was filed against the steel magnate, Michigan governor Jennifer Granholm (D) announced that Severstal had voluntarily agreed to "upgrade" its facility—assisted by state tax credits and local property-tax holidays worth nearly $50 million. How much of that money will be spent on pollution-control technology remains a mystery, however, even to state regulators. A spokesperson for Severstal declined repeated requests for comment.

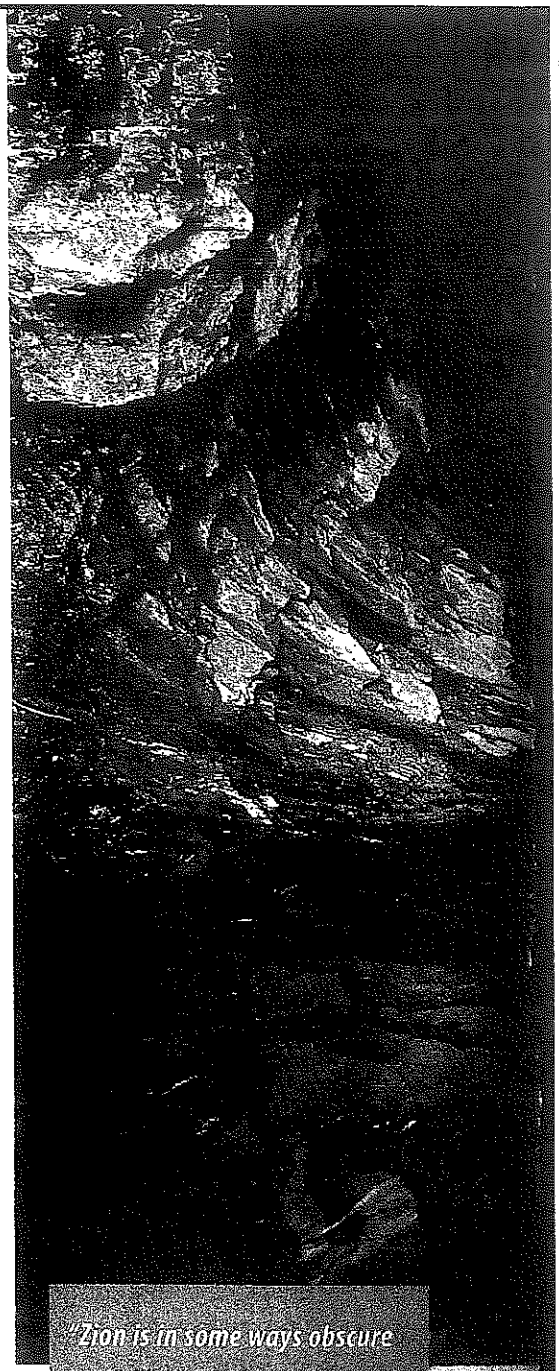
"Anything that improves this plant we're happy about," says Bzdok. "But we don't know if the upgrades are moving in the right direction." Until that's clear, the class-action lawsuit will proceed.

Maisari hopes the lawsuit against Severstal will "bring awareness and some kind of justice that is well deserved, needed, and overdue." Though still involved in the case, his name was removed from the suit after he moved his family several miles north of their south Dearborn neighborhood. (He and the lawyers felt it was important that all named plaintiffs reside in the affected area.) His daughter had taken a nasty fall down the stairs of their two-story colonial, and the Maisaris wanted a ranch-style home that would be easier for her to navigate on her own.

Maisari says he misses the neighborhood where he was raised and started his own family, though he still visits relatives and friends there frequently and attends the mosque near his old home. His son, Ramsey, will finish school at Edsel Ford High in south Dearborn so he can stay with his friends; the teenager has tried out for football and copes with his asthma by using an inhaler before each practice. Yet Maisari admits there are advantages to being miles from the Rouge complex. "Last month, when my daughter was in the hospital in Pennsylvania and my wife was staying with her, I was sitting alone in our new backyard. All the lights were out. It was quiet. I could see the stars. I could enjoy the fresh air and calm. A family of rabbits came out into the grass. I had an evening of such delight."

Finally, Yasser Maisari and his family can indulge in the joy of simple things. He hopes that someday south Dearborn residents will as well. ■

MARILYN BERLIN SNELL *is* Sierra's *senior writer.*



"Zion is in some ways obscure and foreign, in other ways familiar and close. . . . It is a vast labyrinth of narrow canyons where one can become hopelessly lost, shrinking to invisibility."

—Wayne Hamilton, *The Sculpturing of Zion*